

NOVITATES ZOOLOGICAE

Vol. XLI.

MAY 1938.

No. 1.

IN MEMORY OF LORD ROTHSCHILD, PH.D., F.R.S., J.P.
BORN THE 8TH FEBRUARY, 1868, DIED THE 27TH AUGUST, 1937.

BY DR. KARL JORDAN, F.R.S.

(With 13 photographs.)



AGE 7.

LIONEL WALTER, second Baron Rothschild of Tring, will always occupy a place of honour in the history of Zoology. The collections contained in the Museum he founded and maintained are the largest ever assembled by one man, and are in many orders of animals unrivalled even by National Museums, a fit monument to an enthusiastic Zoologist. But he acquired still greater merit by generously placing the contents of the Museum at the service of Science. Numerous letters of condolence from biologists testify to the high esteem in which the deceased was held as a man and scientist and to the deep gratitude of the many specialists who have profited by the Tring Museum in their researches. Lord Rothschild was probably the last non-professional systematist who amassed large collections in more than one class of animals. Love of animals being the

original motive for the foundation of the Tring Museum, and the study of problems of evolution its ultimate aim, one must expect to find exemplified in it the various stages or phases we observe in the development of Zoology during the last hundred years. The animals which lend themselves to easy preservation in a dry state, such as insects, shells, and skins of mammals and birds, were in post-Linnean times collected and classified largely by amateur systematists, the public Museums of Natural History being as yet in their early youth and the professional zoologists of the Universities concentrating almost exclusively on the classes of animals which had to be preserved in liquid. In our days the amateur systematist has to restrict his researches carried out at home to groups of manageable proportions, the National Museums with their much enlarged staffs



AGE 10.

embrace the whole sphere of systematic Zoology, and the University has almost entirely abandoned morphology and systematics for the experimental study of life. The next phase will bring an adjustment when it is realized that the true understanding of life depends on the knowledge of all its aspects. In the Tring Museum there are the series of different species as the primary object of systematic research, long series of specimens of the same species for the study of variation, distribution, and descent, and intersexes, gynandromorphs, hybrids, and mutants as illustrations of the modern subjects of zoological investigations.

As with most private and public collections, the beginning of what has grown into an important Museum was haphazard. Like so many boys, the Honourable Lionel Walter Rothschild, the eldest of the three children of the first Lord Rothschild, head of the famous banking house of N. M. Rothschild and Sons, interested himself in Coleoptera and Lepidoptera, beginning to collect at the early age of seven, according to his own recollection. But unlike other youths, he did not forsake his childhood's love in favour of attractions in other spheres of life, his devotion to natural history collections remaining with him to the end. In the mind of the general public the name of Rothschild is so intimately connected with finance that other activities of any member of the family are quite overshadowed. Yet Walter Rothschild was no mutant. It is not surprising, indeed, that in a family which discovered and developed national finance—which is a very important

part of the life of a nation and may be claimed and acclaimed by scientists as a branch of biology—there is a strong trend towards natural history, manifesting itself in various ways in different members. Walter Rothschild's father was keen on botany and kept an aviary for his own enjoyment and that of his children, all three of whom remained equally fond of animals. Walter's sister breeds horses and other domestic animals and keeps various mammals as pets; and his brother, the late N. Charles Rothschild, who collected insects, acquired fame through his researches in Siphonaptera, an order of blood-sucking insects of vital importance in the investigation of the transmission of tropical diseases, and was the founder of the Society for the Promotion of Nature Reserves. One cousin has very extensive collections



AGE 17.



AGE 20.



AGE 21.

and accustomed him to regard himself as the centre of his world and to expect the fulfilment of his boyish wishes as a natural corollary of his important position. Shy by nature, he became unduly self-centred as he grew up and averse to asking advice. He had ample opportunities in London for indulging in his hobby by buying specimens from natural history dealers, the collections gradually getting too large for the schoolroom and being then stored in a spare bedroom at the back of the house; these collections consisted chiefly of insects, with the addition of a few mounted mammals and birds. The young, slender naturalist had the great advantage of an early acquaintance with a friend of the family, Dr. Albert Günther, the Keeper of Zoology in the British Museum, with whom he remained intimate until Dr. Günther's death. Visits to the Zoological Gardens and the British Museum tended to enhance his interest, and the admiration for all the strange creatures he saw perhaps created in his subconsciousness the ambition to possess one day similar collections of his very own. Anything large made a deep impression on him. His predilection for Ratite birds and Giant Tortoises, and his pride in having record horns and fishes in his Museum, exemplify this trait. The last insects he bought were some *Attacus caesar*, among which there was one specimen larger than any he had of that species in his collection. As a boy and youth he was an assiduous field-collector

of live plants, and another is a physician of repute and owner of a children's hospital. Miriam Rothschild, eldest daughter of Charles, makes an intensive study of parasitic worms, and her brother, Victor, the third Lord Rothschild, devotes himself to Biophysics and Cytology. In Walter Rothschild's life, however, the dominance of natural history was extreme, his active interest in so many different branches of it being inimical to wise restriction.

He was a delicate child who could not be exposed to the rough and tumble of school life, and therefore was educated entirely at home under governess and tutor. Admiration for the intelligent boy and early flattery were not missing,



AGE 22.



AGE 34.

of insects and skilful in setting even very small specimens, a skill he lost in later years. He never learnt to skin a mammal or bird.

In order to widen his views and to perfect his German—in which language he became quite proficient, speaking it fluently, though the grammar was sometimes too much for him—he went with a Mr. Althaus as a companion to the University of Bonn, and remained there two terms, from the autumn of 1886 to July 1887, enjoying the freedom of the life of the “Studenten.” He bought here a collection of German Lepidoptera, now incorporated in the general collection with the exception of the *Micros*, which are still in the original cabinet. Little

is left of his own collecting during his stay abroad, but as a reminder of his student days at Bonn, there were among the wall decorations of his sitting-room two long pipes such as were much in fashion in Germany during the nineteenth century among students, schoolmasters, and parsons. He was proud of them, though he was no smoker, unlike his father and brother, who enjoyed strong cigars. Shortly after his return to England, he went up to Magdalene College, Cambridge, for nearly two years (till June 1889), and came in closer contact with scientists who were in sympathy with his own predilections, particularly Professor Alfred Newton, the famous ornithologist. From this time his life as a Zoologist for the fifty years till his death is the history of the creation and growth of his Museum. The amateur collector who derived pleasure from collecting turned into a naturalist whose collections had the object of increasing our knowledge of nature. His acquaintance with Sir Walter Buller, from whom he acquired a collection of New Zealand birds, drew his attention to the danger of extinction threatening many mammals and birds by the spread of the European population into the remote corners of the earth, a question which remained of great interest to him all his life, the measures of protection of the fauna and flora by the creation of Nature Reserves and National Trusts having his whole-hearted support. He had at Cambridge several dozen live Kiwis, a number of which he kept later at Tring. With the broadening of his scientific horizon at Cambridge, his zoological aims became ambitious, embracing live mammals and birds as well as Museum collections. Besides the aviary of his father, there were already Kangaroos of various kinds and Emus and Rheas in Tring Park, and now enclosures were built in a paddock for a small number of mammals and Cassowaries, the beginning of a zoological gardens. This ambitious undertaking, however, had to be given up later on; the specimens were disposed of, and the wild population in the Park reduced to Rheas and Emus. His large Zoological Gardens occasionally referred to in newspapers never existed. The collections of skins and insects had already so much increased while the Hon. Walter Rothschild was still at Cambridge that they had to be stored at Tring in rented rooms and sheds, and it became obvious that adequate premises had to be



IN THE ZOOLOGICAL GARDENS, LONDON, 1903.

provided in which they were not exposed to deterioration. His father gave him a piece of ground on the outskirts of Tring Park. Here he built a cottage for the insects and books and a smaller one attached to it for a caretaker; at the same time a larger building was erected behind the cottage and connected with it, destined for the display of mounted specimens of all classes of the animal kingdom. The cottages were ready for occupation in 1889, when Walter Rothschild came of age, but the Museum took some time to arrange and the building was not opened to the public until August 1892. Whoever advised him in the making of the plans for this public Museum forgot that all the specimens exhibited should be plainly visible. However, there was one advantage in making the glass cases too high: Walter Rothschild had evidently learnt from Dr. Günther that it is essential for the good preservation of specimens not to expose them to direct sunlight, and there is certainly no danger that the colours of any of the

animals and birds exhibited in these cases will fade. Moreover, the preference he always showed for anything big may have influenced the construction of these high cases. Walter Rothschild recognized in later years that they were excellent for storing large numbers of specimens, but that they did not come up to his expectations as regards display. To modify the building for the requirements of a modern exhibition gallery will be a difficult task.

After leaving the University, Walter Rothschild, following tradition, entered the firm of Messrs. N. M. Rothschild and Sons with the object of studying finance under the tuition of his father, and found but little time for thorough supervision of the ever-



AOE 47.

increasing collections. The mounted vertebrates in the public gallery were quite safe, being well looked after by the caretaker, Mr. A. Minall; but the insects, for which one or two attendants had been engaged, were more exposed to damage on the shelves and in the corners where the boxes were piled up. When in 1891-92 he purchased the collection of Lepidoptera and Coleoptera of the Burgomaster of Vienna, Dr. Cajetan Felder, containing some thousand types of Lepidoptera, the accumulation of material became somewhat chaotic, and Dr. A. Günther urgently advised his young friend to put a reliable zoologist as Curator in charge, recommending Mr. Ernst Hartert, who was personally known to Dr. Günther and Walter Rothschild. Hartert, who was collecting bird skins at that time on the Dutch islands off the coast of Venezuela for Count Berlepsch and Walter Rothschild, accepted the offer of the appointment and came to Tring in October 1892. The writer of these lines had met Hartert on several occasions at the house of Count Berlepsch in Hannoversch Münden, and after some correspondence and a visit to Tring agreed to take over the curatorship of Invertebrates from April 1893.

The collections were already of great size and considerable scientific value in 1893. However, there was much material of inferior quality, and some of it of little use because the data necessary for research were not preserved. One can hardly blame a young and enthusiastic collector with many interests for having accepted such material; for in those days the specimens and their names were the main thing for the average amateur and quite acceptable, be the locality and other data ever so vague. In the 80's of the last century it had not yet entered the mind of every collector that exactness of data is a primary requirement for a scientific collection. For instance, when a Continental insect dealer was asked at Tring in the 90's to give a precise locality for the Lepidoptera that had been selected, he was very angry that "New Guinea" was not considered good enough for Tring. There are some old bills for Lepidoptera supplied in which the localities are given as S. Amerika, Afrika, Indien, the specimens themselves bearing no labels on the pins with additional information! Some of this old material is being kept as an illustration of the history of the progressive change in amateur collecting. Nobody at school or at the University knew, or troubled to tell a budding naturalist, that the specimens collected must be properly labelled. Some of the early mounted Vertebrates at Tring also have only general data or none.

It was the first duty of the new Curators to see to the safety of the collections. The cottage and the rooms at the back of the Museum were not large enough to take all the accumulated material. Many Vertebrates were stored in the Victoria Hall (at Tring) and in sheds near the Museum; the Felder collections of Lepidoptera and Coleoptera were housed in the Unity Hall, and here



AGE 50.



AGE 57.

about 300 fishes, stuffed and in spirit; about 1,500 insects, crustaceans and arachnidae, of the most typical and representative forms, mounted; . . .”

“II. *The Students' Department*, which is entirely devoted to ornithology, coleoptera, and lepidoptera. Here the collections are much more considerable. Of Birds there are at present about 40,000 skins of over 7,000 species; of Beetles, about 350,000 specimens of more than 60,000 species; of Lepidoptera the collection contains about 300,000 specimens of nearly 25,000 species.”

The scientific staff consisted of Walter Rothschild, Ernst Hartert, and Karl Jordan; and, in addition, there was William Warren, who had already been engaged for a while at Tring in studying and arranging the Geometridae (Warren was subsequently more or less regularly employed by the Museum until his death in 1915). A caretaker, Mr. A. Minall, and his assistant, Mr. F. Young, saw to the cleaning and heating of the premises, and an odd-job man looked after the live mammals and birds in the paddock and park. In the summer of 1893, Mr. Arthur Goodson was appointed assistant to the Curators, helping them to label and sort the specimens. The cottage where the work in systematics was carried out was full of cabinets, books, and boxes,

were also piled up numerous boxes containing mounted and unmounted insects, some of the boxes being so badly infested with Dermestid beetles that they had to be burned. The collections were soon brought into some sort of order, so that time became available for research. It is of interest to quote here some statements from “Notes and Details about the Tring Museum” which accompanied the prospectus of NOVITATES ZOOLOGICAE issued in 1893:

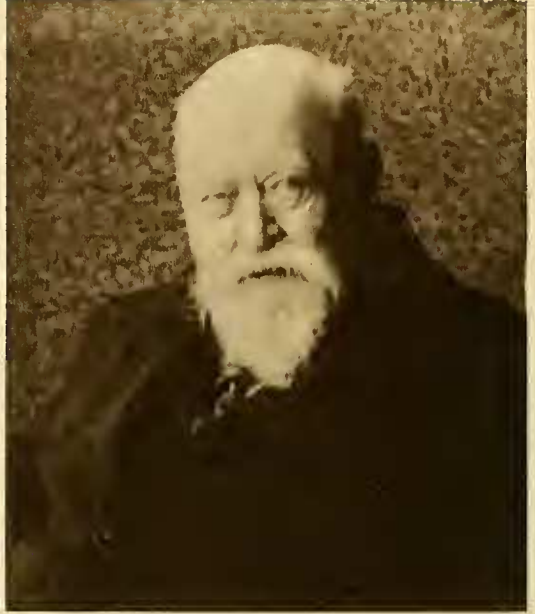
“The Museum contains two distinct departments, namely:

“I. *The Public Galleries*, which contain at present about 950 stuffed mammals, 3,600 stuffed birds; about 200 reptiles, stuffed and in spirit;



DR. E. HARTERT, LORD ROTHSCHILD,
DR. K. JORDAN, AMSTERDAM, 1930.

and there were only two desks with good light available for the three scientists; the junior Curator had to find a place at a corridor window when he wished to use a compound lens or the microscope. The division of work had already been planned when Karl Jordan joined the Museum. Ernst Hartert was to be in charge of the birds and the general management of the Museum; Karl Jordan to name and arrange the Coleoptera; and Walter Rothschild to attend to the Lepidoptera and the Public Galleries, reserving for his own studies any group of Vertebrates or Invertebrates that might specially interest him. In 1893 it was further agreed to encourage outside help as much as possible. The



AGE 68.

number of new species in the collections being already very large, and interesting material requiring recording extensive, it became at once apparent that the manuscripts would soon be much too numerous for the existing periodicals to accept for reasonably quick publication, and therefore Dr. Günther, a frequent visitor to Tring Park, suggested that the Museum should issue its own periodical, publishing manuscripts which were entirely, or for the greater part, based on material in the Tring Museum, the editors to depart from this rule only in very exceptional cases. The advice was accepted, and Vol. I of *NOVITATES ZOOLOGICAE* accordingly issued in 1894, appearing in five numbers containing contributions by nine authors.

Collections had generally been bought by Walter Rothschild as and when they were offered. But when during his Cambridge days Professor Newton had introduced him to Ornithology as a most interesting and suitable subject of research for a gentleman of means, and the foundation was laid of the Ornithological collection of the Tring Museum by the purchase of New Zealand birds from Sir Walter Buller, Walter Rothschild's interest was so thoroughly roused that he sent Henry Palmer, a sailor who could skin birds, to the Chatham Islands with the sole object of collecting all the species of birds occurring on the islands. The description of a new Pigeon, in 1891, from these islands was Walter Rothschild's first contribution to the literature of Zoology (and his last notes, in 1937, were on Cassowaries). It was again Newton who drew Walter Rothschild's attention to the Sandwich Islands by showing him some of the remarkable birds sent home by Scott Wilson. Seeing such birds, and no doubt listening to the professor's exposition of the variation of the birds from island to island, was enough to decide Walter Rothschild on an ornithological exploration of the whole group of islands, and he instructed Palmer to proceed to Hawaii when he had finished his work on the Chatham Islands. Palmer stayed on the Sandwich Islands from 1890 to 1893, and collected with great success, the account of his

collecting being published in *Avifauna of Laysan*, issued in three volumes (1893–1900), the first important work written by Walter Rothschild.

From 1893 onward the Museum entered into direct relations with many explorers, professional collectors, and residents in tropical countries so as to obtain material from places as yet little known. In most cases the collectors engaged by the Museum went abroad at their own risk and expense, often a small sum being advanced for the payment of the initial costs, the Museum being bound by contract to take a certain number of specimens of each species of birds and Lepidoptera at an agreed fair price and having the right to the first offer of specimens of other orders and classes which might be required. Such arrangements worked very well, being advantageous to both contracting parties, and the Museum remained always in friendly relations with Ansorge, Doherty, Beck, Eichhorn, Everett, Hoffmann, Hose, Klages, Kühn, Meek, and a host of other explorers whose collections came to Tring.

Although a rapid worker endowed with a remarkably retentive memory and a keen eye for differences, great gifts for a systematist, Walter Rothschild soon found the time at his disposal too short for the many tasks he had set himself, and already in 1894 the Coleopterist was asked to come to his assistance. The first result of this collaboration was the publication in 1895 of the *Revision of the Papilios of the Eastern Hemisphere exclusive of Africa*, in which for the first time in Lepidopterology geographical races described by various authors as distinct species were almost consistently (as much as the material at hand warranted) reduced to the rank of subspecies and the classification thereby much clarified. The publication had a decided influence on the methods of systematics in Lepidoptera. It was incidentally pointed out that logically the first described subspecies should bear a subspecific name like the other subspecies (*P. eurypylus eurypylus*, *P. eurypylus lycaon*, etc.), but two of the editors of NOVITATES ZOOLOGICAE were much against the duplication of the name in subspecific designations and therefore the accidentally first-described subspecies was termed *forma typica* in the Revision. Collaboration with either of his Curators or with the specialists in the British Museum was the best method of dealing with the rapidly increasing material of the orders in which he was most interested; but Walter Rothschild worked in many instances quite independently, neither discussing the subject with the Curators, nor submitting the manuscript. The careful observer will notice in the numerous papers entirely composed and written by him some interesting peculiarities which might puzzle anybody who was not intimately acquainted with the working of the mind of the author. When describing a new species, the points of difference discovered became so super-conspicuous in his mind that he emphasized them by the employment of superlatives and in print often by the use of clarendon type. Another point is the frequent lack of detail. Although he had studied at Bonn and Cambridge at a period when the acquisition of knowledge in internal and external morphology was one of the main objects of the Zoological curriculum, Walter Rothschild had never taken kindly to the microscope and microtome. Structural details easily escaped him. Like an artist, he perceived the animal as a whole and not the details which made up the picture, and in describing a small insect he painted in words a picture that was vividly formed in his mind without the substructure of detail which would have been revealed by the cold lenses of a microscope. In order to understand and interpret such descriptions,

usually short, one must put oneself into the author's frame of mind. It will also strike the Lepidopterist as rather strange in an author of great experience that he so often laid undue stress on differences of size in closely related forms of butterflies or moths; for it was so well known that size in Lepidoptera depends frequently on the quality or quantity of the food of the caterpillar that it is no criterion of distinctness unless corroborated by other differences. But here Walter Rothschild applied experience gained in Ornithology to the systematics of insects, the species and subspecies of birds being as a rule remarkably constant in size and many subspecies diagnosed by a difference in wing-length only.

In 1893 and 1894 accommodation was already short, and as the collections came in from abroad the lack of space became very embarrassing and caused much waste of time. As a first measure of relief a small corrugated-iron building was put up for the overflow of Lepidoptera cabinets, and in 1897 this was followed by a much larger building of the same type for the birds and additional insect cabinets. And as it appeared quite impossible to build up large collections of both Lepidoptera and Coleoptera with only one Entomologist in charge, it was decided to dispose of the beetles; they were gradually sold, and the Lampyridae given as a present to Olivier, in the end only one small family (Anthribidae) being retained, as the Curator of Entomology did not wish altogether to lose contact with Coleopterists. Additional space and time were thus gained for Lepidoptera.

Up to 1895 all the Lepidoptera were set by professionals in London and elsewhere, but with the greater influx of collections it became imperative to have an assistant on the premises who would attend to the setting of particularly valuable material. Mr. J. W. Shipp, who had been working in the Hope Department at Oxford, was engaged, and came to Tring in 1895 (he died in the winter 1897-8 at the home of his parents at Oxford). In the following year the staff was further increased by the appointment of Mr. F. W. Goodson, the brother of Arthur Goodson, and from this time on the latter worked exclusively in the Ornithological Department and the former in the Department of Entomology. Both had learned to set butterflies and moths, and did some of this work in overtime; several ladies in Tring and neighbourhood also took up setting, working at home, so that at one time there were more than half a dozen outside helpers to cope with the many collections that came in.

Work on the systematics on mammals, birds, reptiles, and insects kept pace with the increase in the collections. The more important of the numerous publications by Walter Rothschild between 1897 and 1908, in collaboration with the Curators, were the *Monograph of the Charaxes*, the *Monograph of the Cassowaries*, the *Revision of the Sphingidae*, the *Revision of the American Papilios*, and *Extinct Birds*. Before the century ended, his work and his Museum were known in all quarters of the globe.

In 1908 there came a break in Walter Rothschild's life. He retired from the City, having neither inclination nor ability for finance, and he could now spend his time with more freedom on scientific pursuits and travel. He had frequently been for four or five weeks in the Alps, but had never gone outside Europe. From 1908 to 1914 he took longer holidays, visiting various European countries and North Africa, always with the object of increasing his collections, Algeria being the principal country visited by him nearly every year, accompanied by one of the Museum's Curators, usually Dr. Hartert. He was not one

of those hardy travellers who can stand any amount of discomfort, and having suffered when a youth from an attack of pneumonia was always afraid of catching a cold, and therefore preferred to remain within easy reach of a physician. It was fortunate that during his first visit to Algeria he made the acquaintance of Dr. Chr. Nissen, the Danish Consul-General, a physician who took an interest in Lepidoptera. When staying in the interior of Algeria, Walter Rothschild's party was generally accompanied by Dr. Nissen. Aflou, Laghouat, Touggourt, and, of course, Biskra, and many places in the coast region and on the central plateau, were visited and some time spent at each for collecting purposes. A more arduous undertaking was a journey to El Oued, in 1909, across a wide stretch of sandy desert, Walter Rothschild on horseback and the other European members of his caravan on camels. As an able collector of Lepidoptera (V. Faroult) was employed for many years, staying in different districts and collecting and breeding specimens all the year round, and as Dr. Hartert made several independent trips to Algeria in company with an assistant who could collect and skin, the Algerian material of birds and butterflies and moths became very extensive; in addition, some hundred specimens of mammals were obtained, among them several new species and subspecies and the Wild Boar and Leopard. It was a good documentation for a critical study of the Algerian fauna, Dr. Hartert publishing a number of papers on the birds, Walter Rothschild several articles on the butterflies and moths, and Charles Rothschild and Dr. Jordan on Siphonaptera.

In 1908 a budget had been agreed upon, intended to limit the yearly expenses of the Museum to a definite sum sufficient to meet the overhead expenses and to leave a good margin for the purchase of further collections. However, Walter Rothschild had always been accustomed to a large expenditure, of which the Museum budget was only a moderate item, and it could really not be expected that he would suddenly turn a blind eye to specimens he coveted. In the same year the administration of the Museum was simplified for the Director by the engagement of a Secretary-Librarian, the books scattered over several rooms and landings were united in a library built in 1907-8, and the Lepidoptera assembled not far from the Museum (Akeman Street) in a house altered for the purpose, being provided with central heating and electric light (the electric light of the Museum buildings was provided, as it still is early in 1938, by the Tring Park Estate, the town having installed electric light only lately). In 1909 the second corrugated-iron structure was pulled down and a large permanent building added to the Museum ready for occupation in 1910, consisting of a basement and two floors, the lower floor being allotted to the entire collection of bird skins and the upper floor to an extension of the public exhibits. In 1912 another large building, a gift from his brother, was begun and finished in 1913, with two large halls for the accommodation of all the Lepidoptera, a basement of the same size and several working-rooms with shelves for the Entomological Library, ample room being provided for the extension of the collection and the Library.

The increase in the overhead expenses since 1908 and the financing of the exploration of North Africa rendered it financially inconvenient to continue the issue of extensive *Revisions* and *Monographs*. The researches on the Saturnian moths, a superfamily in which Walter Rothschild was much interested, were discontinued, only the manuscripts on some small groups being completed and published after the war.

From 1925 onwards Lord Rothschild, who had succeeded to the title on the death of his father in 1915, attended several Entomological, Ornithological, and Zoological Congresses abroad, but after his visit to Algeria in 1914 did not go again on a collecting trip; he felt tired too easily and preferred staying at home.

In 1930 Dr. E. Hartert retired, and in 1931 his assistant, Arthur Goodson, died, the Ornithological Department being carried on by Lord Rothschild. We endeavoured to find a successor to Dr. Hartert with the same enthusiasm for Ornithology, but as there was no prospect of permanent employment and the salary offered moderate, the negotiations came to nothing. That proved to be fortunate, for in 1931, when arrangements were nearly completed for an expedition to New Guinea with the object of collecting birds and Lepidoptera, Lord Rothschild was suddenly confronted with the demand to pay a debt which he had allowed to accumulate without making provision for its ultimate payment, a debt not incurred on account of the Museum. When he confessed his plight and said that he would have to sell the bird-collection in order to meet the debt, substantial assistance was at once offered, but the sum required was fairly large for that moment of general financial depression, the outlook in the City being very gloomy in the autumn of 1931. He tried in vain to exclude from the sale the Parrots and Birds of Paradise in addition to the Ratites, but had to be content with the Ratites and a few specimens of rarities not represented in the British Museum. The collection was packed up and despatched to the American Museum of Natural History, New York, in 1932. The loss of the collection was a great shock to him, and though he continued to work in the Museum at Lepidoptera, to which he had always devoted most of his time, his energy was much diminished; he missed the birds, and it was very hard to make him realize that in consideration of his age and his financial position, it was useless starting anew to build up a bird-collection. It was a disaster for him which preyed on his mind to the end.

In May 1935, when walking from the Museum to the mansion, he slipped in a paved tunnel in the grounds and injured his left knee very severely. The shock brought on an attack of gout, and he had to keep in bed for five months. He could walk again, but was very bent and obliged to use two sticks for safety. He soon became used to his state as an invalid, however, and even attended the 1936 meeting of the British Association at Blackpool, enjoying the drives along the coast and the visits to various gardens at Blackpool and neighbourhood. His capacity for work, however, was practically gone, a couple of hours in the Museum being enough to tire him. When some time after the death of his mother early in 1935 Tring Park was shut up, the Home Farm House at Tring was altered to suit his requirements, and here he lived the last year of his life. Though an invalid who required constant attention, he seemed to be much happier and more content in his new home than he had been for years. In June 1937 his back began to trouble him, and by the middle of the month it became apparent that his spinal cord was affected by cancer, the paralysis extending downwards from the middle of the back. During the first few weeks of his illness his mind remained clear and he could discuss scientific problems and make plans with the Curator for the future of the Museum. Devoted nursing kept him alive till the 27th August, when he died in his sleep early in the morning.

Since the sale of his bird-collection Lord Rothschild had been a less prolific

author than before. The last important paper published by him, in collaboration with Captain Guy Dollman of the British Museum, was a Monograph of the Tree Kangaroos. This work, beautifully illustrated, was a very appropriate finish to his activities as a mammalogist, for the Marsupials were an order of mammals which had interested him deeply from his undergraduate days, the series of species represented by mounted specimens and skins assembled by him in the Tring Museum approaching completeness. His knowledge of the Marsupials and the keenness of his eye are well illustrated by an incident that happened in 1934 and is worth recording. Driving along Brompton Road, he noticed a chauffeur standing at the door of a car with a fur-rug over his arm; he stopped, looked at the rug, took the number of the car, wrote to the lady who owned the car, and bought the rug of Tree Kangaroo pelts for £30, adding it to the collection of skins in the Museum, where it still is, together with letters referring to the transaction. The Marsupials had serious rivals in Lord Rothschild's affection in the Monotremes and the Anthropoid Apes, both groups being better represented at Tring than in any other Museum. His favourite birds were the Ratites and Birds of Paradise, of both of which he has described many novelties. The Cassowaries in particular were a speciality on which he spent much time and money, there being no less than sixty-two mounted specimens in the public galleries at Tring, including many types, a series far in excess of anything preserved in other Museums. The last two notes he published, in 1937, were on Cassowaries. -Albinism and melanism in mammals and birds had a great fascination for him; the number of albinos in the exhibition series being particularly large. His early connexion with Dr. Günther drew his attention to the Gigantic Tortoises, weird creatures which aroused his lively interest because they were so large and moreover threatened with extinction. Among Lepidoptera his favourites were *Papilio*, *Charaxes*, and *Morpho*, *Sphinxidae*, and *Saturniidae*, and in later years *Syntomidae* and *Arctiidae*, of which he has described hundreds of new species. His fondness for large species did not prevent him from studying also small moths, such as Lithosiids and Pyralis, and he always asked collectors going to the Tropics to pay special attention to small Lepidoptera, which, he said, were much neglected by professional collectors because they had little commercial value. Like Charles Oberthür before him, he learnt by his own experience in taxonomy that the old kind of collection containing of each "species" a restricted number of specimens did not give any scope for the study of variation, and he therefore advocated, like Charles Oberthür, the amassing of long series wherever feasible. The idea was carried out by him, there being sometimes hundreds of specimens from the same place in the Tring collection of Lepidoptera. It was a frequent topic of conversation with visitors. He was right in saying that systematics must rise above the mere registration of the species and, being the basis necessary for the solution of biological problems, must be sound. He knew, however, that the systematist is constantly faced by the fact that the material at his disposal is inadequate and his results, therefore, remain often tentative and inconclusive. Long series facilitate research, and facilitation of research was one of the driving factors in Lord Rothschild's activities as a collector. This idea was there from his earliest days as a systematist: for he had adopted the so-called Continental style of setting insects, which makes it easy to handle a specimen and to inspect it under a strong hand-lens or the microscope, whereas the short pin then generally in use in Great

Britain (and nowhere else) leaves insufficient room for good labelling and compels the investigator of the legs or body to take the label off. The adoption by him of glass-bottomed drawers for Lepidoptera was likewise a great convenience for the comparison of the underside of long series. Though Lord Rothschild liked nothing better than showing series of beautifully preserved specimens to interested visitors, the possible service of the collections to science was uppermost with him, and he wished bad specimens to be kept because they might be wanted for research in morphology. Therefore, unlike the old type of amateur who was most anxious that his well-arranged rows of specimens with or without those "ugly" bits of paper on the pins, should not be disturbed, Lord Rothschild was always highly gratified when some new distinctive character of a species was discovered by the dissection of specimens. He was no less liberal in lending material to specialists at home and abroad and in according to scientific visitors every facility for successful work in the Museum. Tall and broad, he made an impression on strangers, who at first stood in awe of the owner of all these collections, but his friendly smile and amiable courtesy soon put them at their ease. His liberality has influenced the policy of other Museums to the great advantage of science. Keeness to increase his own collections did not prevent him from being generous to other Museums, particularly the British Museum, where numerous specimens are labelled as being his donations. In various instances he bought several specimens of a mammal, keeping one for his galleries and giving the others away.

Tring Park not being his property, he had no space in which to keep live animals; but he was so fond of them that he frequently acquired interesting species of mammals, birds, and reptiles and deposited them in the Zoological Gardens in London and elsewhere. Dogs, however, were the greatest attraction for him; his love of them being often very embarrassing, especially in the wilds of Algeria, where he always tried to make friends with any dog he saw; sometimes the dog looked as if it would bite first and then perhaps wag its tail. His interest in natural history went beyond Zoology and embraced Botany as well as Bibliophily. He was one of the original holders of the Victoria Medal of Honour in Horticulture (V.M.H.), established in 1897 with the consent of Queen Victoria "to enable the council of the Royal Horticultural Society to confer conspicuous honour on British Horticulturists resident in the United Kingdom"; Lord Rothschild is survived by only one of the sixty original holders of the medal. Before 1908 his collection of live Orchids was considerable, several species being named after him, and the American Orchid Society electing him an Honorary Member.

The library of the Museum contains a number of rare old books on travel and natural history, of little use for systematic Zoology but of interest for a book-lover, De Bry's publications particularly taking his fancy.

His services to Zoological science were much appreciated, many Ornithological and Entomological Societies electing him an Honorary Fellow; he became a Corresponding Member of the Academy of Natural Sciences of Philadelphia, and in 1898 the University of Giessen conferred on him the honorary degree of Ph.D. In 1899 he was elected a Trustee of the British Museum, in which institute he took as much interest as in his own Museum, and in 1911 he received the blue ribbon of science, becoming a Fellow of the Royal Society in recognition of his services to the natural sciences. He was President of the

Hertfordshire Natural History Society in 1911 and 1912, and of the Entomological Society of London in 1921 and 1922, Chairman of the British Ornithologists' Club from 1913 to 1918, and of the British Oological Association from 1923 to 1932; in 1932 he presided over the Zoology Section of the York Meeting of the British Association, taking on this occasion as the subject of his address, "The Pioneer Work of the Systematist."

Few naturalists who knew Lord Rothschild's pursuits in science were aware that there was another active side to his life. As a young man he served as an officer in the Royal Buckinghamshire Yeomanry, attaining the rank of Major, and when at the outbreak of the Boer War the whole regiment volunteered for active service, and a selection from among the officers and men was accepted, Walter Rothschild regretted he was not numbered among them; he was at that time already a heavy man, requiring exceptionally strong horses, and it was obvious that neither man nor horse would for long stand strenuous campaigning in a hot climate. From 1899 to 1910 he sat in Parliament as member for the Aylesbury Division of Buckinghamshire, was made a Justice of the Peace, and for many years represented Manchester on the Jewish Board of Deputies. Much of his time was taken up by service as an active member or chairman of committees of various Societies and Institutions, and he was particularly interested in the Middlesex Hospital. For a number of years he was chairman of the Tring Urban District Council, and until his death President of the Tring Agricultural Society. He used to hunt regularly with the Rothschild Stag Hounds before he became too heavy for this sport, and was a good shot in the pheasant coverts and at the Tring reservoirs. He remained unmarried and lived with his parents, his mother surviving his father by twenty years, dying in 1935.

At the time of his death the Museum buildings had an aggregate floor-space of nearly an acre and a half, inclusive of the basements for storage.

I. The Public Galleries contained :

1. 2,004 complete mounted mammals, 207 heads, 335 pairs of horns and antlers, 6 large Elephant tusks, and many skeletons, and skulls, some of the horns being record specimens. There were in this series 13 Gorillas, 25 Chimpanzees, 228 Marsupials, 24 Echidnas, etc., the most valuable specimen from the commercial point of view being the Quagga.
2. 2,400 mounted birds, inclusive of 18 Apteryx, 62 Cassowaries, 62 Birds of Paradise, 520 Humming Birds, the Great Auk with skeleton and two eggs, and a fine Korean Eagle.
3. 680 Reptiles and Amphibians, including 144 Giant Tortoises.
4. 914 Fishes.
5. Representative collections of Invertebrates.

II. The Students' Department contained :

6. 1,400 mammal skins with skulls, including a number of types.
7. 4,470 bird skins, among them some extinct species.
8. A very large collection of birds eggs, including the best collection of eggs of Birds of Paradise and a number of perfect eggs of *Aepyornis*.
9. 300 Reptiles, dry, and a small collection in alcohol.

10. Collections of unmounted skeletons of mammals, birds, and reptiles ; numerous bones of fossil birds.
11. Some two million specimens of Lepidoptera, with numerous types (of Geometridae alone over 6,000 types).
12. A collection of Anthribid beetles containing types or paratypes of more than two-thirds of the known species.

III. A Library of nearly 30,000 volumes.

Lord Rothschild had placed the collections at the service of scientists during his life, and he wished them to remain after his death equally available for research. His frequent visits to the British Museum all his life, his intimate connexion with it as a trustee, and his collaboration with members of its staff, turned his mind towards that institute when, during his last illness, he thought of the future of his own Museum. Knowing how short of space the British Museum was, and would remain for a long time, he agreed with his Curator that the Tring Museum made into an annexe of the British Museum would not only enrich the national collections, but could be used immediately to relieve the congestion from which the Entomological Department of the British Museum suffered. He therefore sent a memorandum to the Trustees, offering the entire freehold buildings, collections, and library to the British Museum on condition that the Tring Museum be continued in some form or other as an Institute for Zoological Research. It was touching to see how gratified he was when the Chairman of the Trustees, the Archbishop of Canterbury, wrote and thanked him for his generosity. It made him very happy to hear that the Trustees would accept the gift, pending the consent of the Treasury and Parliament.

His reputation as a Zoologist will be lasting. Whatever the present generation of biologists may think of systematics and Museums, the knowledge of the animals as created by Nature and preserved as well as can be in collections for future generations of mankind will for ever be the subject of research for the scientist and of admiration for the public. The founder of the British branch of the House of Rothschild, Nathaniel Mayer, acquired such fame as a financier that the family name still casts a spell over the imagination of man in all quarters of the globe. His great-grandson owed much to that name, but more to his own activity as a Zoologist. Passing along a different road, he, too, arrived at world-wide fame.

LIST OF SCIENTIFIC PUBLICATIONS.

The names of collaborators are placed in brackets at the end of the quotation.

I. GENERAL.

1894. First glimpses of the Zoology of the Natuna Islands.
Nov. Zool. i, pp. 467, 468. (E. Hartert.)
1899. A review of the Ornithology of the Galápagos Islands, with notes on the Webster-Harris Expedition. **L.c.** vi, pp. 85-142. (E. Hartert.)
1905. On the advantage of the trinomials. **Ibis**, pp. 133-137.
1912. On the term "Subspecies" as used in Systematic Zoology.
Nov. Zool. xix, pp. 135-136.
1913. Bird-life on Oceanic Islands, and insular variation.
Trans. Herts. Nat. Hist. Soc. xv, pp. 1-14.
1914. Mimicry and protective resemblance. **L.c.** xv, pp. 105-120.
A zoological tour in West Algeria. Narrative.
Nov. Zool. xxi, pp. 180-186. (E. Hartert.)
1915. On Algeria: the Tell Region, the Hauts Plateaux, and the Saharan Desert.
Bull. B.O.C. xxxv, pp. 90-99.
Effects of environment on the evolution of Species, discussion.
L.c. xxxv, pp. 128-142.
1918. On the naming of local races, subspecies, aberrations, seasonal forms, etc.
Trans. Ent. Soc. Lond. pp. 115, 116.
1922. President's Address: Algeria and its Fauna.
Proc. Ent. Soc. Lond. 1921-22, pp. 131-162.
1923. President's Address: On some aspects of variation in Lepidoptera.
L.c. 1922-23, pp. 122-134.
1925. Nomenclatural note. **Bull. B.O.C.** xlv, pp. 89, 90.
1932. The pioneer work of the Systematist.
Brit. Assoc. Adv. Sci. York Meeting, 1932, pp. 89-102.
The same in **Nature**, cxxx, pp. 529-531.
- Obituaries:
1916. Henry Ecles Dresser. **British Birds**, ix, pp. 194-196, portrait.
1934. Ernst Johann Otto Hartert.
Ibis, pp. 350-377, two portraits, bibliography.

II. MAMMALIA.

1892. Descriptions of two new Mammals from New Guinea.
Proc. Zool. Soc. Lond. 1892, pp. 545, 546.
1893. On *Mesoplodon bidens*. **Ann. Mag. N.H.** (6), xi, p. 439.
1894. *Propithecus majori* sp. nov. **Nov. Zool.** i, p. 666, pl. xiv.
1895. On two new species of Antelopes. **L.c.** ii, pp. 52, 53, pl. iv.
1897. Note on a new Antelope. **Ann. Mag. N.H.** (6), xx, pp. 376, 377.
Neumann's Hartebeest. **Nov. Zool.** iv, p. 377, pl. xiv.

1898. Note on some Kangaroo hybrids. L.c. v, p. 4.
Notes on *Tragelaphus spekei spekei* and *T. spekei gratus*, with description of a new species. L.c. v, p. 206.
1899. *Dendrolagus maximus*. L.c. vi, p. 217, pl. i.
1900. On a new race of Ibex: *Capra sibirica lydekkeri* subsp. nov. L.c. vii, pp. 277, 278, pl. ii.
1901. Notes on *Bubalis*. L.c. viii, pp. 177, 178.
1902. Two new subspecies of *Proteles*. L.c. ix, p. 443.
Notes on Abyssinian Mammals.
In Powell-Cotton, *Sporting Trip through Abyssinia*, pp. 453-486.
- Note on *Alces bedfordiae*. **Proc. Zool. Soc. Lond.** 1902, ii, p. 317.
1903. Preliminary diagnosis of a new genus and species of Kangaroo. **Nov. Zool.** x, p. 414.
Description of a new species of Gazelle. L.c. x, p. 480, pl. xv.
Note on *Dendrodorcopsis woodwardi*. L.c. x, p. 543.
1905. Notes on *Zaglossus* and description of a new subspecies of *Echidna hystrix*. L.c. xii, pp. 305, 306.
Note on the Eland of the White Nile. L.c. xii, p. 447, pl. xii.
Note on *Macropus rufus* Desm., with description of a new subspecies. L.c. xii, p. 508.
Notes on two Kangaroos from the "Northern Territory of South Australia," with description of a new species. L.c. xii, pp. 509, 510.
Notes on Anthropoid Apes. **Proc. Zool. Soc. Lond.** 1904, ii, pp. 413-440, pl. xxiv.
1906. On African Forest Pigs. L.c. 1906, p. 632.
Description of a new Zebra. L.c. 1906, p. 691.
Description of a new Bush-Buck. L.c. 1906, pp. 691, 692.
Further notes on Anthropoid Apes. L.c. 1906, pp. 465-468.
Zur Nomenclatur der Menschenaffen. **Sitzungsber. Ges. Naturf. Freunde**, pp. 85-87.
1907. Further notes of *Macropus magnus*. **Nov. Zool.** xiv, p. 333, pl. ii.
Description of a new Tree Kangaroo. L.c. p. 506, pl. iv. (F. Foerster.)
On a new race of *Orycteropus*. L.c. p. 506.
Description of a new species and two new subspecies of Antelopes and a new Sheep. **Proc. Zool. Soc. Lond.** 1907, pp. 237, 238.
1908. Note on *Gorilla gorilla diehli* Matchie. **Nov. Zool.** xv, pp. 391, 392, pl. xii.
Microunga angustirostris (Gill). L.c. xv, pp. 393, 394, pls. i-viii.
1909. *Nasua vittata* Tsch. L.c. xvi, p. 333, pl. i.
1910. Notes on Sea-Elephants (*Microunga*). L.c. xvii, pp. 445, 446, pls. viii, ix.
1911. On a new Marsupial. **Ann. Mag. N.H.** (8), vii, p. 337. (F. Foerster.)
1912. Note on *Zaglossus*. *The Field*, December Number.
1913. Some notes on the genera *Zaglossus* and *Tachyglossus*. **Nov. Zool.** xx, pp. 188-191.
On *Ovis lervia* Pallas and its subspecies. L.c. xx, pp. 459, 460.
Descriptions of some new forms of Antelope, with notes. **Ann. Mag. N.H.** (8), xii, pp. 574-576.
1914. Ein neues Känguruh aus Neuguinea. **Nov. Zool.** xxi, pp. 261, 262. (F. Foerster.)

1920. Preliminary description of a new Warthog.
Ann. Mag. N.H. (9), vi, p. 416.
1921. On two new races of *Oryx*.
L.c. (9), viii, pp. 209, 210.
1921. Captain Angus Buchanan's Air Expedition.—III. Ungulate Mammals.
Nov. Zool. xxviii, pp. 75–77.
1922. On a new subspecies of *Zaglossus*, with remarks on the other species of the genus.
Ann. Mag. N.H. (9), x, pp. 129–131. (O. Thomas.)
- On a new race of Bharal.
L.c. (9), x, p. 231.
- Description of a new Baboon.
L.c. (9), x, p. 232.
1923. Remarks on a Mountain Gorilla from near Lake Kiva.
Proc. Zool. Soc. Lond. pp. 176, 177.
1927. On a new race of Bongo and of Gorilla.
Ann. Mag. N.H. (9), xix, p. 271.
1927. Description of a new race of Aardvark (*Orycteropus afer kordofanicus*).
L.c. (9), xix, p. 512.
- On the skull of *Gorilla gorilla halli* Rothsch.
L.c. (9), xix, p. 512.
1933. New Mammals from Dutch New Guinea.
Proc. Zool. Soc. Lond. 1932, ii, pp. 1082–1084. (G. Dollman.)
- On Mammals collected in Dutch New Guinea by Mr. F. Shaw Mayer in 1930.
L.c. 1933, i, pp. 211–219, pls. i–iv. (G. Dollman.)
- A new Tree-Kangaroo from the Wondiwoi Mts., Dutch New Guinea.—
Abstr., **Proc. Zool. Soc. Lond.** i, p. 40, and reprinted in *Proc. Zool. Soc. Lond.* ii, pp. 540, 541. (G. Dollman.)
1936. The genus *Dendrolagus*.
Trans. Zool. Soc. Lond. xxi, pp. 477–548, pls. 35–57. (G. Dollman.)

III. AVES.

1891. Description of a new Pigeon of the genus *Carpophaga*.
Proc. Zool. Soc. Lond. pp. 312, 313, pl. xxviii.
1892. Descriptions of seven new species of birds from the Sandwich Islands.
Ann. Mag. N.H. (6), x, pp. 108–112.
- A new Pigeon: *Ptilopus salvadori*, p. 10, Jobi.—Exhibition of three new birds from the Sandwich Is.: *Palmeria mirabilis*, *Loxops ochracea*, *Hemignathus affinis*, p. 16 (no descriptions).—A new Duck: *Anas laysanensis*, p. 17, Laysan I.
Bull. B.O.C. i.
1893. *Columba rupestris pallida* subsp. nov. p. 41, Altai.
Ornith. Monatsb. i, p. 97. (E. Hartert.)
- Die Formen von *Fringilla spodiogenys* in Nordafrika.
L.c. i, p. 97. (E. Hartert.)
- Descriptions of three new birds from the Sandwich Islands.
Ibis, pp. 112–114.
- The Avifauna of Laysan and the neighbouring islands; with a complete history to date of the Birds of the Hawaiian possessions.
Folio, London, parts i and ii; pp. i–xiv and 1–26, 56 pls. (E. Hartert.)
- Description of a new species from the Sandwich Is.: *Hemignathus lanaiensis*, p. 24, Lanai.—A new genus and species of Fringilline bird from the Sandwich Is.: *Pseudonestor xanthophrys*, pp. 35, 36. (E. Hartert.)—A new species of Rail: *Rallus muelleri*, pp. 40, 41, Auckland

I.—Three new birds from the Sandwich Is.: *Acrulocercus bishopi*, p. 41, Molokai; *Himatione newtoni*, p. 42, Maui; *Himatione wilsoni*, p. 42, Maui.—Exhibition of a melanistic variety of the Razorbill (*Alca torda*), p. 43.—A new species of Albatross: *Diomedea immutabilis*, p. 48, Laysan.—*Loxops wolstenholmei* n.sp., p. 56, Oahu; *Viridonia maculata* (Cab.), p. 57, Oahu; *Anous hawaiiensis* sp.n., p. 57; *Oestrelata nigripennis* sp.n., p. 57, Kermadec Is.; *Thalassogeron salvini* sp.n., p. 58, N. Zealand; *Diomedea bulleri* sp.n., p. 58, N. Zealand.—Notes on the Genus *Apteryx*, pp. 59–62.

Bull. B.O.C. i.

Note on *Himatione dolei* Wils., p. 9.—A new species of Snipe: *Gallinago tristrani*, pp. 11, 12. Antipodes I. L.c. iii.

1894. On *Turturoena sharpei* Salvad. and *Osmotreron everetti* sp. nov.

Nov. Zool. i, pp. 40–41, pl. iii.

On Albino Swallows and Wheatears.

L.c. i, p. 667.

On the Habitat of *Chalcopsittacus duivenbodei* Dub.

L.c. i, p. 677.

Salvadorina waigiensis gen. nov. et sp. nov.

L.c. i, pp. 683, 684. (E. Hartert.)

On a new *Miro* from the New Zealand Region.

L.c. i, p. 688.

On a new Bustard from the Palaearctic region. L.c. i, p. 689. (E. Hartert.)

Pseudonestor xanthophrys a Drepanine Bird.

L.c. i, p. 692.

A series of Snipes from the New Zealand region, with remarks thereon, p. 16.—Note on *Palmeria dolei* (Wils.) p. 25.—Exhibition of egg of Great Auk, and eggs of *Ptilorhis victoriae*, p. 36.—Note on *Apteryx*, p. 36.—Exhibition of three species of birds, p. 42.—Exhibition of birds from the Talaut Is., p. 46.—On *Parus owstoni*, p. 46.—On *Aithurus polytmus* (Linn.) and the new race *Aithurus taylori*, pp. 46, 47.—A Japanese specimen of *Diomedea immutabilis*, p. 47.

Bull. B.O.C. iii.

A new genus and species of bird from New Zealand: *Traversia lyalli*, pp. 10, 11. Stephens I.—On *Craspedophora mantoui* Oust., p. 11.

L.c. iv.

1895. On *Salvadorina waigiensis* Roths. & Hart. **Nov. Zool. ii**, p. 22, pl. iii.

Note on the *Loxops* of Oahu.

L.c. ii, p. 54.

Further notes on the Houbara Bustard.

L.c. ii, p. 54 (E. Hartert).

A new Bird of Paradise.

L.c. ii, p. 59, pl. v.

Note on the Stephens Island Rock-Wren *Traversia lyalli* Rothsch.

L.c. ii, p. 81.

A new species and genus of Rollers.

L.c. ii, p. 479.

A new species of Bower-Bird.

L.c. ii, p. 480.

A new species of Rail.

L.c. ii, p. 481.

A new species of Tanager.

L.c. ii, p. 481.

The White Swallows of Aylesbury.

L.c. ii, p. 84.

On a new Parrot.

L.c. ii, p. 492.

Exhibition of Birds of Paradise of different genera and remarks thereon, pp. 21, 22.—A new species of Bower-bird: *Ailuroedus jobiensis*, pp. 26, 27.—*Spermophilopsis* (nom. emend.) to replace *Drepanorhynchus* Dubois 1894, p. 37.—On *Sterna vittata* Gmel. p. 37. Bounty I.—Note on *Amblyornis inornata*, *Parotia carolae*, and other Birds of Paradise, p. 42.

Bull. B.O.C. iv.

1896. List of three small collections from British New Guinea, mostly brought together in the Owen Stanley Mts.
Nov. Zool. iii, pp. 8-19, pl. i. (E. Hartert.)
 Notes on two more specimens of *Astrapia splendidissima*. L.c. iii, p. 19.
 List of a collection made by Mr. Albert S. Meek on Fergusson, Trobriand, Egum, and Woodlark Islands. L.c. iii, pp. 233-251. (E. Hartert.)
 On some species in a small collection made on the Owen Stanley Mts. in the Kaiari and Oriori districts between Mts. Alexander and Nisbet in January 1896. L.c. iii, pp. 252-255. (E. Hartert.)
 On some skins collected from April to June on Mount Victoria, Owen Stanley Mts., mostly at elevations of from 5,000 to 7,000 feet. L.c. iii, pp. 530-533. (E. Hartert.)
 List of a collection made in the Aru Islands by Captain Cayley Webster from May to July 1896. L.c. iii, pp. 534-536. (E. Hartert.)
Uratelornis chimaera Rothsch. (Description appeared in Vol. ii. p. 479.) L.c. iii, pl. ii.
 Exhibition of *Astrapia splendidissima* and *Amblyornis*, p. 38.—A new Pigeon from Sumba: *Ptilopus dohertyi*, p. 46.—Exhibition of Hummingbirds, p. 46. **Bull. B.O.C.** v.
 A new Parrot from New Guinea: *Psittacella picta*, p. 5, Mt. Victoria, Owen Stanley Range.—A new genus and species of Bird of Paradise: *Loboparadisea sericea*, pp. 15, 16. L.c. vi.
 1897. On Differences between Gldenstadt's Redstart and its Eastern Ally. **Nov. Zool.** iv, pp. 167, 168.
 Description of a new Hill-Wren from Flores. L.c. iv, p. 168.
 On the Figures on Plate II. L.c. iv, p. 169.
Comatibis eremita (Linn.), a European bird. L.c. iv, pp. 371-377, pls. viii-x. (E. Hartert, O. Kleinschmidt.)
Rhytidoceros everetti spec. nov. **Journ. Ornith.** p. 513.
 Exhibition of *Loboparadisea sericea*, *Nemophilus macgregoriae*, and *Loria loriae*, with a note on *Loria mariae* and *Loria loriae*, pp. 24, 25.—*Rhamphocoelus inexpectatus* sp. n. p. 32, Panama.—Notes on *Oestrelata haesitata* (Kuhl), *Paradisea intermedia* De Vis, *Ruticilla erythrogastra* Gld. and *E. grandis* Gould, pp. 40, 41.—On the subspecies of *Paradisea minor*: typical *P. minor*, Dutch N. Guinea; *P. minor jobiensis* subsp. n., Jobi; *P. finschi* A. B. Meyer, German N. Guinea, pp. 45, 46.—Notes on *Ardeetta neoxena* Cory, *Eclectus cornelia* Bonap., *Psittuteutes weberi* Bttik., *Ps. euteles*, and *Paradisea minor* var. *albescens* Musschenbr., pp. 53, 54.—Purchase of Brehm Collection, p. 54. **Bull. B.O.C.** vi.
 Three new birds from Ecuador: *Crypturus berlepschi*, p. 5; *Odontophorus parambae* and *Nemosia rosenbergi*, p. 6.—Exhibition of various birds and note on female of *Eudynamis honorata*, p. 15.—New species from New Guinea: *Cyclopsittacus macilwraithi*, p. 21; *Pachycephala gamblei*, *Pachycephala salvadorii* n. em., and *Epinachus astrapioides*, p. 22. L.c. vii.
 1898. Notes on *Paradiseidae*. **Nov. Zool.** v, pp. 84-87.
 On a new Parrot of the family *Loriidae*. L.c. v, p. 110.
 Description of a new Cassowary. L.c. v, p. 418.

- Notes on some Parrots. L.c. v, pp. 509–511, pl. xviii.
Casuarius loriae sp. nov. L.c. v, p. 513.
- Three new species: *Pitta dohertyi*, p. 29, Sula Mangoli; *Ptilinopus mangoliensis*, S. Mangoli, and *Pt. everetti*, Alor, p. 334.—Note on an expedition to the Galápagos Is. and descriptions of six new birds: *Phalacrocorax harrisi*, Narborough I.; *Sula websteri*, Clarion I.; *Nesomimus hulli*, Culpepper I.; *Nesomimus affinis*, Narborough I.; *Certhidia becki*, Wenman I.; *Certhidea drownei*, Culpepper I., pp. 51–53.—Two new birds from British New Guinea: *Ifrita* (gen. n.) *coronata* and *Charmosyna atrata*, pp. 53, 54. **Bull. B.O.C.** vii.
- Pitta meeki* sp. n., p. 6, Rossel I.; *Pitta novaehiberniae* Ramsay, distinct from *P. mackloti*, p. 7; *Nesomimus carringtoni* sp. n., p. 7, Barrington I., Galápagos; exhibition of specimens, p. 7.—Egg of Twelve-wired Bird of Paradise, p. 13.—A new subspecies of Cassowary, *Casuarius casuarius intensus*, p. 21, no loc., and a new Cormorant: *Phalacrocorax traversi*, p. 21, Macquarie Is. L.c. viii.
- Paradiseidae.* **Das Tierreich**, 2. Lief., pp. vi and 52.
- Birds of Paradise collected by Captain Cayley-Webster.—In *Through New Guinea and the Cannibal Countries*; Appendix II, pp. 376, 377.
1899. Memoir on the Cassowaries. **Proc. Zool. Soc. Lond.** pp. 773–776.
- Note on *Casuarius casuarius sclateri*. **Nov. Zool.** vi, p. 75.
- A review of the Ornithology of the Galápagos Islands, with Notes on the Webster-Harris Expedition. L.c. vi, pp. 85–205, pls. v, vi. (E. Hartert.)
- On some rare birds from New Guinea and the Sula Islands. L.c. vi, pp. 218, 219, pls. ii, iii.
- The genus *Apteryx*, with a chapter on the Anatomy of the Kiwis by F. Beddard. L.c. vi, pp. 361–402, pls. ix–xvi. (F. Beddard.)
- Nest and egg of *Cnemophilus macgregori* De Vis., p. 26, and description of *Casuarius casuarius violicollis*, subsp. n., Aru Is., p. 27.—A new Thrush: *Geocichla dumasi*, Buru, p. 30.—On *Casuarius casuarius slateri*, the *P. cinctus* group of *Ptilinopus*, and varieties of *Lophophorus refulgens*, p. 42.—Two new subspecies of Cassowaries: *Casuarius picticollis hecki*, p. 49, German N. Guinea; *Casuarius uniappendiculatus aurantiacus*, p. 50, German New Guinea.—The species and subspecies of Cassowaries, p. 55; *Palaeornis salvadorii* and *P. derbyana*, p. 56; *Telespiza cantans* and *T. flavissima*, p. 56; *Mirafra erythropygia* and *Cerchneis alopeax*, p. 57; *Pyrocephalus dubius* and *P. nanus*, p. 57. **Bull. B.O.C.** viii.
- On *Eclectus westermanni* Bp., p. 2.—Exhibition of and comments on the red-bellied species of *Pitta*, pp. 3, 4.—A new species of Oyster-catcher: *Haematopus reischeki*, p. 4, New Zealand.—A new form of Lory: *Eos variegata obiensis*; and exhibition of *Scolopax saturata*, New Guinea, and *Neoscolopax rochusseni*, Obi Major, p. 16.—On *Eupetes geislerorum*, A. B. Meyer, p. 26. L.c. x.
- Ein neuer interessanter Vogel aus Neuguinea. **Ornith. Monatsb.** vii, p. 137.
- Ein kleiner Beitrag zur ferneren Kenntnis der Ornis von Neu-Hannover. L.c. vii, pp. 138, 139. (E. Hartert.)

1900. The Avifauna of Laysan and the neighbouring islands ; with a complete history to date of the Birds of the Hawaiian Possessions.
 London, Part iii, pp. xx and 127-320, 27 pls. (E. Hartert.)
 A monograph of the genus *Casuarinus*. With a dissertation on the morphology and phylogeny of the Palaeognathae (*Ratitae* and *Crypturi*) and Neognathae (*Carinatae*) by W. P. Pycraft.
Trans. Zool. Soc. Lond. xv, Part v, pp. 109-290, pls. xxii-xlv.
 (W. P. Pycraft.)
Lalage sharpei sp. n., p. 40, Upolu, Samoa ; on *Cracticus quoyi* and *C. rufescens*, p. 40.—*Turnix olivii* sp. n., p. 44, Cooktown ; *Geocichla papuensis* Seebohm, p. 44.—On *Aquila fulvescens*, p. 51, Albania.—On *Phalacrocorax chalconotus*, pp. 52, 53 ; on *Urubitinga urubitinga*, p. 53, Caripé, Venezuela.—Albinos in the Tring Museum, pp. 67-94 (E. Hartert).—On *Burnesia gracilis*, p. 100, Luxor ; *Parotia duivenbodei* sp. n., p. 100, Dutch N. Guinea.—*Nasiterna bruijini* and *Chenorhamphus grayi*, p. 101, Ambernoh R. **Bull. B.O.C.** x.
 Eggs of *Bubo ascalaphus* and melanistic specimen of *Podiceps fluviatilis*, p. 10.—New birds : *Crateroscelis pectoralis* and *C. rufobrunnea*, p. 25, *Microeca viridiflava* and *Poecilodryas cyanus salvadorii*, p. 26 (E. Hartert).—On *Amalocichla sclateriana* and *A. brevicauda*, p. 26, British N. Guinea (E. Hartert).—A new species of Crow : *Gazzola unicolor*, p. 29, Banggai (E. Hartert).—On *Diphyllodes guliemitertii*, p. 30.—*Grallaria parambae*, pp. 36, 37, N. Ecuador. L.c. xi.
1901. Einige Bemerkungen über Kasuare. **Journ. Ornith.** pp. 360, 361.
 Notes on Papuan Birds.
Nov. Zool. viii, pp. 55-88, pls. ii-iv. (E. Hartert.)
 Notes on Papuan Birds. L.c. viii, pp. 102-162. (E. Hartert.)
 List of a collection of birds from Kulambangra and Florida Islands in the Solomons Group. L.c. viii, pp. 179-189. (E. Hartert.)
 List of a collection of birds from Guadalcanar Island.
 L.c. viii, pp. 373-382. (E. Hartert.)
 On *Microeca viridiflava*, *Sericornis salvadorii*, and *Dacnis berlepschi*, p. 44 (E. Hartert).—A new species of Bush-shrike : *Laniarius dohertyi*, pp. 52, 53, Nandi Escarpment.—Note on *Phasianus mongolicus* and *Ph. reevesi*, p. 53.—A new subspecies of Kingfisher : *Alcyone azurea yamdenae*, p. 65, Timor Laut Is.—A new Woodpecker : *Chloronerpes litae*, p. 70, Lita, N. Ecuador.—The real male of *Dacnis berlepschi* Hart., pp. 70, 71. **Bull. B.O.C.** xi.
 On Central Asiatic Pheasants and two new species : *Phasianus berezowskyi*, Kansu, and *Ph. hagenbecki*, N.W. Mongolia, pp. 19-22.—New species from Isabel, Solomon Is. : *Pitta anerythra*, p. 22, and *Ceyz meeki*, p. 23.—Exhibition of birds from Kulambangra and Isabel, p. 23.—New birds : *Leptoptila battyi*, p. 33, Coiba I., off Panama ; *Loborhamphus* (gen. n.) *nobilis*, p. 34, Dutch N. Guinea. L.c. xii.
1902. On the British Dipper. **Ibis**, pp. 524, 525.
 List of a collection of birds from south of the Issik-Kul in Russian Turkestan. **Nov. Zool.** ix, pp. 161-168.
 Further notes on the Fauna of the Galápagos Islands. Notes on the birds. L.c. ix, pp. 381-418, pl. x. (E. Hartert.)

List of a collection of birds made on Ysabel Island.

L.c. ix, pp. 581-594, pls. vii, xi. (E. Hartert.)

List of a small collection of birds made on Treasury Island, Solomon Islands.

L.c. ix, p. 594. (E. Hartert.)

Nests and eggs from the Galápagos Is.: *Certhidea olivacca fusca*, *Geospiza fuliginosa*, *Pyrocephalus dubius*, *Nesomimus adamsi*, pp. 46, 47.—A variety of *Eclectus roratus*, p. 47.—A new subspecies: *Rheindarius ocellatus nigrescens*, p. 55, Ulu Prahang, Malay Pen.—On *Corvus eremita* Linn., pp. 56, 57.—Exhibition of photographs of 5 races of *Apteryx*, 12 races of *Casuarus*, and of a hybrid between Peahen and Guinea-fowl, p. 57.—A new species of Petrel: *Oestrelata wortheni*, p. 62, Pacific Ocean, not far from the Galápagos Is.—Two new birds: *Hypotaenidia kuehni*, p. 75, Tukan Bessi Is.; *Francolinus coqui angolensis*, p. 76, Angola.

Bull. B.O.C. xii.

Birds from Cocos I., p. 6.—Exhibition of *Micranous diamesus* and three species of Gannets, p. 7.—A new species of Gannet: *Sula granti*, p. 7, Galápagos Is.

L.c. xiii.

1903. Notes on Papuan Birds. **Nov. Zool.** x, pp. 65-116, pl. i. (E. Hartert.)

Notes on Papuan Birds. L.c. x, pp. 196-231. (E. Hartert.)

Notes on Papuan Birds. L.c. x, pp. 435-480, pls. xiii, xiv. (E. Hartert.)

Chalcurus inopinatus Rothsch. L.c. x, pl. ii.

Berichtigung. **Ann. Mus. Hungar.** i, pp. 447-450. (E. Hartert.)

On *Janthothorax mirabilis* (Reichen.), p. 31.—Two new species of birds: *Chalcurus inopinatus*, p. 41, Ulu Pahang, Malay Pen.; *Myzomela kuehni*, p. 42, Wetter.—Remarks on Pheasants: *Phasianus torquatus pallasi* subsp. n., p. 43.—*Stigmatops notabilis* Finsch from Wetter, p. 43.—A new species of Rail: *Hypotaenidia wakensis*, p. 78, Wake I.

Bull. B.O.C. xiii.

A new Albatross: *Thalassogeron carteri*, p. 6, N.W. Australia.—A collection of birds from Hainan (with descriptions of 2 new species and 7 new subspecies), pp. 6-9.

L.c. xiv.

1904. *Microgoura meeki* Rothsch. **Nov. Zool.** xi, pl. xxi.

On *Phasianus*, pp. 36-38.—On *Fulica cornuta*, p. 38.—On *Casuarus*, with descriptions of 3 new species and 3 new subspecies, pp. 38-40.—Hybrids of Pheasants, p. 58.—A gigantic new species of *Centropus*: *C. albidiventris*, p. 59, Gizo I., Solomon Is.—A new Parrot from the Philippines: *Prioniturus waterstradti*, pp. 71, 72, S. Mindanao.—A new Pigeon: *Microgoura* (gen. n.) *meeki*, pp. 77, 78, Choiseul I., Solomon Is.—A new Pitohui: *P. dichrous monticola*, p. 79, Upper Aroa R.—On a series of Barn-owls, pp. 87-90.—A series of Ratite eggs, p. 90.

Bull. B.O.C. xiv.

Two new Kingfishers: *Halcyon bougainvillei*, p. 5, Bougainville; *Halcyon owstoni*, p. 61, Northern Mariannes.—Exhibition of *Paryphephorus duivenbodei* and *Charmosyne atrata*, p. 7.—A new *Pitta* from the Solomon Is.: *P. anerythra pallida*, p. 7, Bougainville.—A new Raven from Bougainville: *Corvus meeki*, p. 21, Bougainville.—On *Phoebetria fuliginosa* (Gmel.) and *Ph. fuliginosa cornicoides* (Hutton), p. 28.

L.c. xv.

1905. Further contributions to our knowledge of the Ornis of the Solomon Islands. **Nov. Zool.** xii, pp. 243-268, pl. x. (E. Hartert.)

- A new species of Cassowary: *Casuarius roseigularis*, p. 32, no loc.—Note on Eider-ducks, pp. 43, 44.—On *Diomedea carteri* (Rothsch.), pp. 44, 45.—*Psittacirostra psittacea deypei*, nom. nov., to replace *Ps. ps. olivacea* Rothsch., p. 45.—Discussion on *Dendroeca aestiva* (Gmel.), p. 47.—Albinos of Penguins, p. 57. **Bull. B.O.C.** xv.
- Notes on extinct Parrots from the West Indies, with descriptions of 5 unnamed species: *Conurus labati*, p. 13, Guadeloupe; *Anadorhynchus purpurascens*, p. 13, Guadeloupe; *Anadorhynchus martinicus*, p. 14, Martinique; *Ara erythrocephala*, p. 14, Jamaica; *Ara gossei*, p. 14, Jamaica.—Clutch of 3 eggs of *Comatibis eremita*, p. 15, Mogador. L.c. xvi.
1906. Two new Birds of Paradise. **Tring**, 3 pp.
Two new birds: *Granatellus pelzelni paraensis*, Para; *Eulabeornis castaneiventris sharpei*, Wokan, Aru Is., p. 81.—A new species of *Polyplectron*: *P. katsumatae*, pp. 111, 112, Hainan. **Bull. B.O.C.** xvi.
- On *Astrapia rothschildi* Foerster and *Parotia wahnesi* Rothsch., pp. 7, 8.—A new Parrot: *Charmosyna stellae wahnesi*, pp. 27, 28, Sattelberg, German N. Guinea.—A new Pigeon: *Henicophaps foersteri*, p. 28 New Britain (E. Hartert). L.c. xvii.
1907. On extinct and vanishing birds. A short essay on the birds which have presumably become extinct within the last 500 years, and also those birds which are on the verge of extinction, including a few which, though not yet so far gone, are threatened with extinction in the near future. **Ornis**, xiv, pp. 191–217.
- Extinct birds. An attempt to unite in one volume a short account of those birds which have become extinct in historical times—that is, within the last six or seven hundred years. To which are added a few which still exist, but are on the verge of extinction. London, Fol., 244 pp., 42 pls.
- Notes on Papuan Birds. **Nov. Zool.** xiv, pp. 433–446. (E. Hartert.)
- List of a collection of birds made by Mr. A. S. Meek in the mountains on the Upper Aroa River and on the Angabunga River, British New Guinea. L.c. xiv, pp. 447–483. (E. Hartert.)
- Some notes on Cassowaries. L.c. xiv, pp. 504–505, pls. v–vii.
- The British Willow Tit (*Parus atricapillus kleinschmidti* Hellmayr). **British Birds**, i, pp. 44–47.
- Baer's Pochard as a British bird. L.c. i, pp. 63, 64.
- A new species of Parrot: *Conurus canibuccalis*, pp. 48, 49, Humaytha R., Madeira.—*Pipra nattereri* from the Rio Madeira, and *Cinclus schulzi* from Tucuman, p. 49.—On *Palaeornis intermedia*, *P. schisticeps*, and *P. cyanocephala*, pp. 49, 50.—On the threatened extinction of the breeding home of birds on Ailsa Craig, p. 56.—A very rare Parrot: *Urochroma dilectissima* Selater, among Bogotá skins, p. 77.—A new Bird-of-Paradise: *Lophorina minor latipennis*, Rawlinson Mts., German N. Guinea, p. 92. **Bull. B.O.C.** xix.
- On *Carpodacus incertus* Grant, p. 9.—On a new species of Bullfinch: *Pyrrhula owstoni*, pp. 9, 10, Formosa (E. Hartert).—On *Calophasis mikado* Grant, and other Pheasants, pp. 22–25.—An unknown Bird-of-

Paradise belonging to a new genus: *Pseudastrapia* (gen. n.) *lobata*, p. 25, Dutch New Guinea.—On *Loborhamphus nobilis* and *Janthothorax mirabilis*, p. 25.—Exhibition of eggs of Birds-of-Paradise, p. 36.

L.c. xxi.

1908. The birds of Vella Lavella, Solomon Islands.

Nov. Zool. xv, pp. 351–358, pl. xiii. (E. Hartert.)

On a collection of birds from San Christoval, Solomon Islands.

L.c. xv, pp. 359–365. (E. Hartert.)

Note on *Casuarinus casuarinus bistriatus* Oort.

L.c. xv, p. 392.

Exhibition of Algerian bird-skins, p. 6.—A new species of the genus *Lioptilus*: *L. rufocinctus*, pp. 6, 7, Rugege Forest.—On *Drepanornis albertisi geisleri* A. B. Meyer, p. 7.—A new species of Crombec: *Sylvietta neumanni*, p. 42, West of L. Tanganyika.—On *Parotia berlepschi* and *P. carolae*, p. 42.

Bull. B.O.C. xxiii.

1909. Note sur le Gypaète et les Aigles criards. **Rev. Fr. Orn.** i, pp. 105, 106.

Unusual birds in Hertfordshire.

Brit. Birds, ii, p. 309.

Description of a new bird from Africa.

Ibis, pp. 690, 691, pl. x.

A new species of Weaver-Finch: *Lagonosticta graueri*, p. 102, N.W. of L. Tanganyika.—A new form of Wryneck: *Iynx torquilla mauretanicus*, p. 103, N. Algeria.—On the Little Owl, p. 104.

Bull. B.O.C. xxiii.

A new species of Tree-Partridge: *Arboricola rolli*, pp. 7, 8, Battak Mts., Sumatra.—Pieces of the egg-shell of a Struthious bird from the South Algerian desert, and egg of *Megalapteryx huttoni*, pp. 8, 9.—A new Sunbird: *Aethopyga seheriae owstoni*, p. 32, Nauchau I., S. China.

L.c. xxv.

1910. Notes on Eagle-Owls. **Nov. Zool.** xvii, pp. 110–112. (E. Hartert.)

On *Caprimulgus aegyptius* and *C. aegyptius saharae*, p. 73.—Eggs collected in Algeria, pp. 74, 75.—On *Perdix montana* Brisson, p. 81.—On white-breasted Cormorant, p. 89.

Bull. B.O.C. xxv.

A new form of Amblyornis: *A. subalaris germanus*, pp. 13, 14, Rawlinson Mts., German N. Guinea.—On *Cuculus jacksoni* Sharpe and *Corythornis cyanostigma*, p. 14.—On a new Bird-of-Paradise from the Snow Mts. in Dutch N. Guinea: *Parotia carolae meeki*, p. 35; and on *Paradisea mariae* Reichenow, p. 36.

L.c. xxvii.

1911. Über einige neue Formen vom Schneegebirge in Neuguinea.

Ornith. Monatsb. xix, pp. 157, 158. (E. Hartert.)

Eine neue Form von *Pachycephala*.

L.c. xix, p. 178. (E. Hartert.)

Preliminary descriptions of some new birds from Central New Guinea.

Nov. Zool. xviii, pp. 159–160. (E. Hartert.)

Ornithological explorations in Algeria.

L.c. xviii, pp. 456–550, pls. ix–xi, xv–xxv. (E. Hartert.)

On recently described *Paradiseidae*, with notes on some other new species.

Ibis, pp. 350–367, pls. v, vi.

On the former and present distribution of the so-called *Ratitae*, or ostrich-like birds, with certain deductions and a description of a new form by C. W. Andrews.

Verhandl. v. Intern. Ornith. Kongr. Berlin,

1910, pp. 144–174. (C. W. Andrews.)

Preliminary descriptions of some new birds from Central New Guinea.

Nov. Zool. xviii, pp. 159, 160. (E. Hartert.)

- A new Petrel and a new Spider-hunter : *Puffinus obscurus atlanticus*, p. 43, near Madeira ; and *Melilestes novae-guineae flaviventris*, p. 44, Aru Is. (E. Hartert).—Two new Parrots : *Charmosynopsis multistriata*, p. 45, Oetakwa R., and *Nasiterna pygmaea viridipectus*, pp. 45, 46, Oetakwa R.—On Mr. Meek's Oetakwa Expedition, p. 46. **Bull. B.O.C.** xxvii.
- Two new species of Honey-eaters : *Melirrhophetes foersteri* and *Melipotés ater*, pp. 12, 13 (E. Hartert).—A new species of Thickhead from New Guinea : *Pachycephala tenebrosa*, p. 20.—Some new birds from New Guinea, pp. 33–35 (E. Hartert).—*Cyclopsitta blythi meeki*, the same as *Cyclopsittacus godmani*, p. 35 (E. Hartert).—On three races of *Pristorhamphus*, pp. 35, 36 (E. Hartert). L.c. xxix.
1912. On some newly described Birds-of-Paradise, and some undescribed eggs of the same group. **Ibis**, pp. 109–112, pl. ii.
- Ornithological explorations in Algeria. List of birds collected and observed. **Nov. Zool.** xviii, pp. 471–550. (E. Hartert.)
- List of a collection of birds made by Mr. Albert S. Meek on the Kumusi River, North-Eastern British New Guinea. L.c. xix, pp. 187–206. (E. Hartert.)
- List of birds collection by Mr. A. S. Meek at Haidana, Collingwood Bay, in North-Eastern British New Guinea. L.c. xix, pp. 207–209. (E. Hartert.)
- Remarks on Cassowaries and description of a new species : *Casuarius keysseri*, Rawlinson Mts., German N. Guinea, pp. 49–52. **Bull. B.O.C.** xxix.
- Alteration of plumage due to derangement or injuries to the genital organs, pp. 52–58. L.c. xxix.
- A new subspecies of Albatross : *Diomedea culminata mathewsi*, p. 70, Campbell I., New Zealand.—Exhibition of birds' eggs from New Guinea, p. 117.—Exhibition of and remarks on skins of Birds-of-Paradise and Parrots, pp. 117, 118. L.c. xxix.
- A new Weaver-finch from Madagascar : *Foudia omissa*, pp. 26, 27. L.c. xxxi.
1913. On some Australian forms of *Tyto*. **Nov. Zool.** xx, pp. 280–284. (E. Hartert.)
- List of the collections of birds made by Albert S. Meek in the Lower Ranges of the Snow Mountains, on the Eilanden River, and on Mount Goliath, during the years 1910 and 1911. L.c. xx, pp. 473–527. (E. Hartert.)
- Obituary notices of W. B. Tegetmeier, H. J. Pearson, E. A. Wilson, and R. Collett, p. 44.—Melanistic specimens of Pheasants and of some other birds, albinistic birds from his collection, pp. 45–51.—Exhibition of and remarks on hybrids exhibited from his collection, pp. 51–54.—Remarks on eggs and birds from Algeria, pp. 106, 107. **Bull. B.O.C.** xxxi.
- Remarks on various Cassowaries, pp. 34, 35.—Remark on *Chelidon rufula* and *Ch. smithi*, p. 42.—Chairman's Address, pp. 52–56.—Remarks on the genus *Bradyornis* and description of a new subspecies : *Br. pallidus sharpei*, Abyssinia, pp. 65, 66.—A new species of Cassowary : *Casuarius foersteri*, p. 66, S.E. New Guinea.—Remark on change in colour of

- plumage and on Müllerian mimicry, p. 67.—On immature examples of *Accipiter gularis* and of three species of Birds-of-Paradise, pp. 74, 75.—
On the correct name of Montagu's harrier, pp. 75, 76. L.c. xxxiii.
1914. Notes on some *Conurus* of the "emops" group. **Avicult. Mag.** v, p. 153.
- On a collection of birds from Goodenough Island. **Nov. Zool.** xxi, pp. 1-9. (E. Hartert.)
- List of a small collection of birds from the Aicora River. L.c. xxi, pp. 10-12. (E. Hartert.)
- A zoological tour in West Algeria. List of birds collected and observed. L.c. xxi, pp. 180-204, pls. vii, viii. (E. Hartert.)
- On the birds of Rook Island, in the Bismarck Archipelago. L.c. xxi, pp. 207-218. (E. Hartert.)
- On a new form of Rhea. L.c. xxi, p. 223. (C. Chubb.)
- The birds of the Admiralty Islands, north of German New Guinea. L.c. xxi, pp. 281-298, pl. x. (E. Hartert.)
- Birds from the Admiralty Is., with descriptions of new species and subspecies, pp. 104-109 (E. Hartert).—Notes on Algerian birds, p. 140.—Note on *Chersophilus duponti*, p. 141.—Remarks on the nesting habits of *Passer simplex* in Algeria, p. 143. **Bull. B.O.C.** xxxiii.
- Chairman's Address, pp. 2-5.—A new subspecies of Cassowary from Jobi I.: *Casuarius papuanus goodfellowi*, pp. 5-7.—A new species of Goshawk from New Guinea: *Accipiter (Astur) eudiabolus*, pp. 7, 8; and note on a young female Goshawk from Halmahera, p. 8 (E. Hartert).—A new form of Kingfisher: *Ceyx solitaria mulcata*, pp. 24, 25 (E. Hartert).—A new form of *Dicaeum*: *D. geelvinkianum rosseli*, p. 32, Rossel I. (E. Hartert).—Remarks on *Halcyon nigrocyanea*, p. 33 (E. Hartert). L.c. xxxv.
1915. The birds of Dampier Island. **Nov. Zool.** xxii, pp. 26-37. (E. Hartert.)
- The birds of Vulcan Island. L.c. xxii, pp. 38-45. (E. Hartert.)
- Notes on Papuan birds. L.c. xxii, pp. 46-60. (E. Hartert.)
- On the Genus *Fregata*. L.c. xxii, pp. 145, 146.
- Note on the genus *Sula*, pp. 41-45, with description of a new subspecies: *S. dactylatra californica*, p. 43.—Varieties of Common Partridge, p. 45. **Bull. B.O.C.** xxxv.
- Chairman's Annual Address, pp. 29-34.—Remarks in a discussion on the bearing of Oology on classification, p. 20.—Remarks on breeding in immature plumage of various birds, pp. 40, 41. L.c. xxxvi.
1916. On some forms of *Coracina* from the Solomon Islands. **Nov. Zool.** xxiii, pp. 289-291. (E. Hartert.)
- A new *Monarcha* from Rossel Island. L.c. xxiii, p. 297. (E. Hartert.)
- On *Edoliisoma incertum* (Meyer) and *E. meyeri* Meyer, p. 58.—Note on *Scolopax saturata* Horsf. and *Scolopax saturata rosenbergi* Schl., p. 66.—Descriptions of and remarks on 5 new Flycatchers from the Solomon Is., pp. 72-74 (E. Hartert).—On *Scolopax saturata* Horsf., and its subspecies *rosenbergi* Schleg., pp. 86, 87. **Bull. B.O.C.** xxxvi.
- Chairman's Annual Address, pp. 2, 3.—On *Crex porzana*, p. 3.—A new Flycatcher from Australia: *Microeca flavigaster laetissima*, p. 4, Queensland. L.c. xxxvii.

1917. Review of the forms of *Lalage karu* inhabiting the Papuan subregion, pp. 15-17 (E. Hartert).—On *Tyto arfaki* Schleg., pp. 17-19.—A new subspecies of *Myzomela*: *M. eichhorni interposita*, p. 38, New Georgia and Rendova (Hartert).—On the status of *Lophophorus impejanus* Lath. and *L. refulgens*, pp. 49-51.—Remarks on *Oenanthe*, p. 57. L.c. xxxvii.
Annual address of the Chairman, pp. 1-3.—A new subspecies of Gamebird from Borneo: *Melanoperdix nigra borneensis*, pp. 3, 4.—Remarks on African Pigeons, with description of a new subspecies, *Turtur afer slateri*, pp. 25, 26. L.c. xxxviii.
1918. A few additional notes on the birds of Rossel Island, Louisiade group. **Nov. Zool.** xxv, pp. 311, 312. (E. Hartert.)
Further notes on the birds of Sudest Island, or Tagula, in the Louisiade group. L.c. xxv, pp. 313-326. (E. Hartert.)
Note on *Turtur afer slateri*, pp. 37, 38.—On an Eagle-Owl from North Algeria, pp. 38, 39.—Remarks on a recently described Albatross, p. 39.—A curious *Rhipidura* from Kapaur, Western New Guinea, pp. 57, 58.—A new form of *Lioptilus*: *L. abyssinicus ansorgei*, p. 78, Benguela.—Remarks on the status of the Wildfowl on the Tring Reservoirs, pp. 79, 80. **Bull. B.O.C.** xxxviii.
Remarks on the picture of the White Dodo by Pieter Witthoos, pp. 16, 17.—Note on *Crossoptilon mantchuricum*, p. 17. L.c. xxxix.
1919. On one of the four original pictures from life of the Réunion or White Dodo. **Ibis**, pp. 78, 79, pl. ii.
Remark on the Black-necked Grebe, p. 34.—On a new subspecies of Ostrich: *Struthio camelus syriacus*, and a key to the males and eggs of the five known forms of Ostriches, pp. 81-83. **Bull. B.O.C.** xxxix.
1920. On New Guinea Parrots of the *desmaresti* group of the genus *Opopsitta*, pp. 64-67.—On a new species of Blood-Pheasant: *Ithaginis clarkei*, pp. 67, 68, N.W. Yunnan.—Exhibition of eggs of *Paradisidae* and *Corvidae*, p. 123.—On a model of *Dinornis maximus* Owen, p. 133.—Note on *Ifrita kowaldi* (de Vis), pp. 134, 135. L.c. xl.
Two new birds from Asben: *Myrmecocichla buchanani* and *Anthus sordidus asbenaicus*, p. 33. L.c. xli.
1921. On the correct name of D'Aubenton's "Manucode à Bouquets." **Ibis**, p. 465.
On a collection of birds from West-Central and North-Western Yunnan. **Nov. Zool.** xxviii, pp. 14-67.
On some birds from the Weyland Mountains, Dutch New Guinea. L.c. xxviii, pp. 280-294.
A new species of Snipe from the New Zealand region: *Coenocorypha aucklandica iredalei*, p. 63.—A new Thrush from Ceram: *Turdus joiceyi*, pp. 74, 75 (E. Hartert).—On *Oreoibis akleyorum* Chapm., p. 111.—A new subspecies from Buenos Aires: *Thinocorus apoda venturii*, p. 111.—A new species of *Paradisea*: *P. mixta*, p. 127, no loc.—On *Paradisea apoda granti*, p. 127.—A new Bird-of-Paradise: *Paradisea apoda subintermedia*, pp. 138, 139.—Exhibition of eggs of Struthious birds, pp. 149, 150. **Bull. B.O.C.** xli.
Exhibition of eggs of *Alcididae*, *Tetraonidae*, and *Phasianidae*, p. 34. L.c. xlii.

1922. On the names of certain Parrots of the genus *Lorius* Bodd. = *Eclectus* Wagl. **Ann. Mag. N.H.** (9) ix, pp. 411-412.
 Note on egg of *Struthiolitus*, pp. 71, 72.—Exhibition of eggs of Larks and Pipits, pp. 80, 81.—*Tanisiptera danae intensa* subsp. nov., p. 91, New Guinea.—On an egg of *Struthiolithus* from Honan, p. 123.
Bull. B.O.C. xlii. (E. Hartert.)
 Descriptions of (11) new Yunnan birds, pp. 9-12.—A new subspecies of Flycatcher: *Empidonis semipartitus orleansi*, p. 45, Upper Nile.—On two very rare Owls from South Abyssinia, pp. 45, 46.—On an example of *Asio capensis* (Smith), pp. 45, 46.—A white variety of *Scopus umbretta bannermani* Grant, p. 46. L.c. xliii.
1923. On a second collection sent by Mr. George Forrest from N.W. Yunnan. **Nov. Zool.** xxx, pp. 33-58.
 An Ornithological Autumn Journey to Algeria. L.c. xxx, pp. 79-88. (E. Hartert.)
 On a third collection of birds made by Mr. George Forrest in N.W. Yunnan. L.c. xxx, pp. 247-267.
 The Reading Sewage Farm as a possible bird sanctuary, p. 83.—Remarks on intermediate specimens between *Paradisea apoda raggiana* and *P. a. novaeguineae*, p. 115.—A new bird from Buru: *Madanga* (gen. n.) *ruficollis*, p. 117 (E. Hartert).—On sporadic and racial Hybrids, pp. 126-129.—*Crossoptilon crossoptilon crossoptilon*, p. 129, N.W. Yunnan.—On a new Courser from Fuerteventura: *Cursor cursor bannermani*, pp. 165, 166. **Bull. B.O.C.** xliii.
 Exhibition of Chats' eggs from Rumania and North Africa, pp. 1, 2 (E. Hartert).—Exhibition of and remarks on eggs of *Balaeniceps*, *Phoenicopterus*, *Megalornis*, and many other birds, pp. 9-11 (E. Hartert).—Eggs of European Titmouses and other birds, pp. 15-17 (E. Hartert). **Bull. B. Ool. Assoc.** i.
1924. Notes on *Lophoceros jacksoni* Grant and *L. deckeni* (Cab.) **Ann. Mag. N. H. London** (9), xiv, p. 317.
 Birds from St. Matthias I., with descriptions of seven new forms, pp. 50-53 (E. Hartert).—On a British-killed specimen of *Cursorius cursor*, p. 93. **Bull. B.O.C.** xliv.
 A new species of Lory and of Honey-eater from New Ireland: *Domicella albidinucha* and *Philemom eichhorni*, pp. 7, 8 (E. Hartert).—*Centropus violaceus* from New Ireland, p. 9.—A specimen of the "Hairy Moorhen," p. 9. L.c. xlv.
 Exhibition of and comments on eggs of *Pittidae*, *Caprimulgidae*, *Podargidae*, *Steatornithidae*, *Eurylaemidae*, and Cuckoos, pp. 33-36.—Exhibition of eggs of *Charadrius*, *Thinornis*, *Lymnocyptes*, *Capella* and *Coenocorypha* and remarks on some of them, pp. 47, 48. **Bull. B. Ool. Assoc.** i.
1925. On a fourth collection of birds made by Mr. George Forrest in N.W. Yunnan. **Nov. Zool.** xxxii, pp. 292-313.
Muscicapa blythi renamed *M. collini*, p. 90. **Bull. B.O.C.** xlv.
 A new form of Cassowary: *Casuarinus casuarinus lateralis*, p. 30, north coast to North-East N. Guinea.—On *Oenanthe seebohmi* near Biskra, p. 45. L.c. xlvi.

- Exhibition of eggs of larger *Limicolae* and remarks on some of them,
p. 58. **Bull. B. Ool. Assoc. i.**
1926. On the Avifauna of Yunnan, with critical notes.
Nov. Zool. xxxiii, pp. 189-343.
Supplemental notes on the Avifauna of Yunnan. **L.c.** pp. 395-400.
Ein ausgestorbener Drepanidide: *Sassius simplex* Rothsch. & Hart.
Journ. Ornith. 74, pp. 386-388, pl. ix. (E. Hartert.)
On the variation in *Centropus ateralbus* (Less.), pp. 50, 51.—An appar-
ently extinct bird of the family *Drepanididae*: *Sassius* (gen. n.) *simplex*
sp. n., p. 51, Sandwich Is. (E. Hartert).—Two new species from New
Britain: *Accipiter luteoschistaceus* and *Turdus talaseae*, p. 53 (E.
Hartert).—On various forms of *Fulvetta* and description of a new
subspecies: *F. chrysotis forresti*, p. 64, Yunnan.—Faked bird-skins,
p. 81. **Bull. B.O.C.** xlvi.
On One-wattled Cassowaries, pp. 26-28. **L.c.** xlvi.
Eggs of Vultures and Eagles, pp. 89, 90.—Eggs of Falcons and Buzzards,
with data, pp. 97-99.—Exhibition of Cranes' eggs and remarks thereon,
pp. 117-119. **Bull. B. Ool. Assoc. i.**
1927. Corrections and criticisms to the article on the Avifauna of Yunnan.
Nov. Zool. xxxiii, pp. 398-400.
Supplement to the Avifauna of Yunnan (*Novitates Zoologicae*, xxxiii,
pp. 189-343). **L.c.** xxxiv, pp. 39-45.
Remarks on the Carolina Parrot, *Conuropsis carolinensis*, p. 130.—
Exhibition of drawings and specimens of Melanistic forms of various
families of birds, and remarks thereon, pp. 138-143.—On pictures of
the White Dodo, p. 144. **Bull. B.O.C.** xlvii.
On two Humming-birds hitherto considered as hybrids, p. 41.
L.c. xlviii.
Exhibition of eggs of *Oenanthe*, various species and subspecies, pp. 36,
37 (E. Hartert).—Exhibition of eggs of *Argusianus*, *Rheinardtius*,
Numida, *Carpococcyx*, *Cabalus*, *Tricholimnas*, and other birds, with
remarks thereon, pp. 37, 38. **Bull. B. Ool. Assoc. ii.**
1928. Wild hybrid between Mallard and Pintail.
Scottish Naturalist, pp. 89, 90.
A pure white example of the Red-necked Grebe, p. 73.—Description of a
new Cassowary: *Casuaris rogersi*, pp. 87, 88, no loc.—A new Ground-
Pigeon: *Otidiphaps nobilis aruensis*, p. 88.—Remarks on a series of
hermaphrodite and gynandromorphic birds, pp. 89, 90.—The egg of
the Flightless Rail from Inaccessible I., Tristan da Cunha, p. 121.—
Exhibition of 52 species of Rails and remarks thereon, pp. 122-124.
Bull. B.O.C. xlviii.
On a pale variety of the Kestrel and similar varieties of other birds,
pp. 4-9.—On a Great Ank and egg, p. 9.—A new race of Cassowary:
Casuaris bicarunculatus intermedius, pp. 9-10, Aru Is. **L.c.** xlix.
Exhibition of and short remarks on eggs of *Calopezus*, *Tinamus*, *Crypturus*
and many others, pp. 67-69.—Exhibition of eggs of Bustards and other
birds, with remarks thereon, pp. 80-82. **Bull. B. Ool. Assoc. ii.**
1929. *Ailuroedus buccoides* and its subspecies.
Nov. Zool. xxxv, p. 59. (E. Hartert).

- Note on *Lamprolaima rara* and *L. olivacea*. L.c. xxxv, p. 81.
- A British specimen of *Turdus dauma aureus* Holandre, p. 58, Suffolk.—
Exhibition of hybrid Ducks and remarks thereon, pp. 93–99.—Note on
Manucodia ater alter and a new subspecies: *M. a. subalter*, pp. 109, 110.
Bull. B.O.C. xlix.
- Exhibition of drawings on Cassowaries and remarks thereon, pp. 5, 6.—
Remarks on Lämmergeier, p. 18.—On the three known species of
Xanthomelas, p. 33. L.c. 6.
- On a series of eggs of various Rails from all over the world, pp. 103–106.—
Exhibition of eggs of Eagles, pp. 140, 141. Bull. B. Ool. Assoc. ii.
1930. On the breeding of the Sarus Crane (*Grus antigone* Linn.) at Tring.
Avicult. Mag. viii, pp. 89–91, 2 photographs.
- Notes on the preceding article of Dr. Stresemann (Welche Paradiesvogel-
arten der Literatur sind Hybriden Ursprungs?).
Nov. Zool. xxxvi, pp. 16–17.
- Exhibition of Birds-of-Paradise and remarks thereon, pp. 38–40.—
Melanistic mutant of Common Pheasant, p. 40.—On his Sarus Cranes,
p. 67.—On three races of *Turdus philomelos*, p. 68.—The hitherto
undescribed eggs of the Tristan da Cunha Thrush and Diving Petrel
(*Nezocichla eremita* and *Pelecanoides urinatrix dacunhae*), p. 74.
Bull. B.O.C. l.
- On the hitherto unknown eggs of the Paradise-Crow (*Lycocorax pyrrho-
pterus pyrrhopterus*) and *Phonygammus kereaudreni kereaudreni*, p. 9.—
Exhibition of a series of male Pochard (*Fuligula ferina*) and remarks
thereon, p. 25. L.c. li.
- On the eggs of *Cicinnurus regius*, p. 2.—Exhibition of eggs of Birds-of-
Paradise, pp. 2, 3. Bull. B. Ool. Assoc. iii.
1931. A preliminary review of the Mooruk (*Papuanus bennetti*) Group of
Cassowaries. Nov. Zool. xxxvi, pp. 181–183, pls. i, ii.
- On a collection of birds made by Mr. F. Shaw Mayer in the Weyland
Mountains, Dutch New Guinea, in 1930.
L.c. xxxvi, pp. 250–276, pls. iii, iv.
- Notes on *Paradiseidae* with a list of species, subspecies, and hybrids
exhibited at the Seventh International Ornithol. Congress.
Proc. 7th Intern. Ornith. Congr. Amsterdam, 1930, pp. 285–298.
- Note on Nomenclature, p. 68.—A new subspecies: *Trugon terrestris mayri*,
p. 69, Hollandia.—On a pair of American Wigeon, p. 99, North Uist.—
A new subspecies of Lark: *Aethocorys personata intensa*, p. 100,
N'Guasa Nyiro R. Bull. B.O.C. li.
- A new race of *Cypseloides*: *C. fumigatus major*, p. 36, Tucuman.—Two
hitherto undescribed eggs: *Pseudorestes ferrugineus brevipennis* and
Paradisea rubra, p. 37. L.c. lii.
1932. On a new Bird of Paradise. Ann. Mag. N.H. (10), x, 1932, p. 126.
- Ornithologische Ergebnisse der Expedition Stein, 1931–32.
Nov. Zool. xxxviii, pp. 127–247 (partim: *Paradiseidae*, *Psittaci*,
Ralli).
- A series of Pheasants bred in England and remarks thereon, pp. 80, 81.
—A new subspecies: *Sylvia undata maroccana*, p. 82, N.W. Marocco.—
Note on three Cassowaries, p. 82.—Perversion of plumage in Pheasants,

- p. 94.—On a specimen of *Spathula clypeata*, p. 102.—A correction: *Sylvia undata maroccana* renamed *S. u. tingitana*, p. 105. **Bull. B.O.C.** lii.
 On *Casuaricus uniappendiculatus rufotinctus*, p. 238.—A curious variety of the Blackbird at Tring Park, p. 238. **L.c.** liii.
 1937. Two new subspecies of Cassowaries: *Casuaricus papuanus shawmayeri*, p. 120, Krätke Mts., and *C. casuaricus grandis*, p. 121 (?), North coast of Dutch N. Guinea. **L.c.** lvii.

IV. REPTILIA.

1894. On Giant Land Tortoises. **Nov. Zool.** i, pp. 676, 677, pl. xi.
 Remarks and corrections relating to the living Giant Tortoise on Mauritius. **L.c.** i, p. 690.
 1895. Further notes on Gigantic Land Tortoises. **L.c.** ii, p. 483.
 1896. Further notes on Gigantic Land Tortoises. **L.c.** iii, pp. 85–91.
 1897. Further notes on Gigantic Land Tortoises. **L.c.** iv, pp. 407, 408, pl. xiii.
 1898. Note on *Testudo sumeirei*. **L.c.** vi, pp. 359, 360.
 1901. A new Land Tortoise from the Galápagos Is. **L.c.** viii, p. 372.
 1902. Further notes on the Fauna of the Galápagos Is.
L.c. ix, pp. 373, 374, photographs. (E. Hartert.)
 Note regarding *Testudo elephantopus*. **L.c.** ix, p. 448.
 Further notes regarding *Testudo elephantopus*. **L.c.** ix, p. 618.
 Description of a new species of Gigantic Land Tortoise from the Galápagos Is. **L.c.** ix, p. 619.
 1903. Description of a new species of Gigantic Land Tortoise from Indefatigable I. **L.c.** x, p. 119.
 Note on *Uroplates fimbriatus lichenius* subsp. nov.
L.c. x, p. 490, pls. iii, iv. (A. W. Head.)
 1907. A new species of Giant Tortoise. **L.c.** xiii, pp. 753, 754.
 1915. The Giant Land Tortoises of the Galápagos Is. in the Tring Museum.
L.c. xxii, pp. 403–417, pls. xxi–xxxii.
 On the Gigantic Land Tortoises of the Seychelles and Aldabra-Madagascar group with some notes on certain forms of the Mascarene group.
L.c. xxii, pp. 418–442, pls. xxiii–lxxvi.
 1925. Giant Tortoises of the Galápagos and Mascarene Is.
Proc. Linn. Soc. Lond. p. 40.
 1927. The Giant Monitor Lizard. **The Field**, Jan. 1927, p. 115, fig. 1.
 Exhibition of a mounted specimen of *Varanus komodensis*.
Proc. Zool. Soc. Lond. p. 256.
 1928. Notes on Gigantic Land Tortoises. **L.c.** pp. 658–660.

V. PISCES.

1931. The record Bream for Britain. **The Field**, p. 629.
 The largest Bream ever recorded. **L.c.** p. 897.

VI. INSECTA.

A. COLEOPTERA.

1893. On two new species of the genus *Enoplotrupes*.
Ann. Mag. N.H. (6), xii, pp. 36–38. (K. Jordan.)
 On some new or little known species of Coleoptera from the East.
L.c. pp. 452–455. (K. Jordan.)

1894. Six new species of *Plusiotis* and one new *Anoplostethus*.
Nov. Zool. i, pp. 504–507. (K. Jordan.)

B. LEPIDOPTERA.

1892. A collection of Lepidoptera from S.W. Celebes.
Proc. Ent. Soc. Lond. 1892, pp. 14–16.
 Exhibition of and comments on *Neptis mimetica* n.s., *Cynthia acquicolor*¹ n.s., and other Lepidoptera. L.c. p. 21.
 On a collection of Lepidoptera from Timor, Pura, Sumba, and other islands. L.c. pp. 21–23.
 On a little known species of *Papilio* from the Island of Lifu, Loyalty group. **Trans. Ent. Soc. Lond.** p. 141, pl. iv.
 On a new and also on a little known species of *Pseudacraea* in the collection of the Hon. Walter Rothschild.
 L.c. pp. 201, 202, pl. x. (A. G. Butler.)
 Notes on a collection of Lepidoptera made by William Doherty in Southern Celebes during August and September 1891: *I. Rhopalocera*.
D. Ent. Zeits. Iris, v, pp. 429–442, pls. iv–vii.
1893. Zwei neue Charaxes-Formen. L.c. vi, pp. 348–350.
 Two new species of Lepidoptera from German New Guinea.
Ann. Mag. N.H. (6), xii, pp. 455–457. (K. Jordan.)
1894. Descriptions of new *Sphingidae* in the collection of Dr. Otto Staudinger.
D. Ent. Zeits. Iris, vii, pp. 297–302, pls. v–vii.
 Exhibition of *Ornithoptera paradisea* Staudg. and other Lepidoptera.
Proc. Ent. Soc. Lond. p. 15.
 On a new species of the Hepialid genus *Oenetus*.
Ann. Mag. N.H. (6), xiii, p. 440.
 Notes on *Sphingidae*, with descriptions of new species.
Nov. Zool. i, pp. 65–98, pls. v–vii.
 Some new species of Lepidoptera. L.c. i. pp. 535–540, pl. xii.
 Additional notes on *Sphingidae*. L.c. i. pp. 541–543.
 On five new *Delias*. L.c. i. pp. 661–662.
 Additional notes on *Sphingidae*. L.c. i. pp. 664, 665.
 On some new local races of *Papilio vollenhovii* Feld and *Papilio hipponous* Feld. L.c. i. pp. 685–687.
 On a new genus and species of Butterfly. L.c. i. p. 687.
1895. On a new species of the Family of *Sphingidae*. L.c. ii, p. 28.
 Notes on *Saturnidae*; with a Preliminary Revision of the Family down to the genus *Automeris*, and descriptions of some new species.
 L.c. ii, pp. 35–51, pl. x.
 Two new species of *Rhopalocera* from the Solomon Is.
 L.c. ii, pp. 161, 162.
 A new species of *Theretra* from the d'Entrecasteaux Is. L.c. ii, p. 162.
 Revision of the *Papilios* of the Eastern Hemisphere, exclusive of Africa.
 L.c. ii, pp. 167–463, pl. vi. (K. Jordan.)
 Some new forms of the genera *Bizarra* and *Milionia*.
 L.c. ii, pp. 464, 465. (K. Jordan.)
 On two new Moths and an aberration. L.c. p. 482.

¹ These names apparently have escaped notice.

- On *Milionia* and some allied genera of *Geometridae*.
L.c. ii, pp. 493-498, pl. vii.
- Some notes on my Revision of the Eastern *Papilios*, exclusive of Africa.
L.c. ii, pp. 503, 504. (K. Jordan.)
- On *Copaxa multifenestrata* (H.-S.)
L.c. ii, p. 504.
- Description of a new local form of *Troides victoriae* (Gray) from Bougainville I., Solomon group. **Entomologist**, xxviii, pp. 78, 79.
- Explanation of plates vii-x. **Nov. Zool.** ii (in front of pl. vii).
1896. Two new *Charaxes* from the Lesser Sunda Is.
Entomologist, xxix, pp. 308, 309.
- Notes on Heterocera, with descriptions of new genera and species.
Nov. Zool. iii, pp. 21-62. (K. Jordan.)
- Further notes on my Revision of the *Papilios* of the Eastern Hemisphere, exclusive of Africa.
L.c. iii, pp. 63-68.
- New Lepidoptera. L.c. iii, pp. 91-99.
- Notes on Heterocera, with descriptions of new genera and species.
L.c. pp. 185-208, pl. iv. (K. Jordan.)
- Some undescribed Lepidoptera. L.c. iii, pp. 231, 232.
- New Lepidoptera. L.c. iii, pp. 322-328.
- On some new subspecies of *Papilio*. L.c. iii, pp. 421-425.
- Descriptions of some new species of Lepidoptera, with remarks on some previously described forms. L.c. iii, pp. 600-603, pls. xiii-xv.
1897. On *Eudaemonia brachyura* Drury and *E. argiphontes* Kirby.
Proc. Ent. Soc. Lond. p. 37.
- On a new species of *Papilio* from Uganda. **Entomologist**, xxx, p. 165.
- Descriptions of some new species and subspecies of Lepidoptera.
Nov. Zool. iv, pp. 179-184.
- Some new species of Heterocera. L.c. iv, pp. 307-313, pl. vii.
- Notes on Heterocera, with descriptions of new genera and species.
L.c. iv, pp. 314-316, pl. iv. (K. Jordan.)
- On some new Butterflies and Moths. L.c. iv, pp. 507-513.
1898. On some new or rare Lepidoptera of the Old-World regions.
L.c. v, pp. 96-102.
- Some new Lepidoptera from the East. L.c. v, pp. 216-219.
- Some new Lepidoptera from Obi. L.c. v, pp. 416-418.
- A Monograph of *Charaxes* and the allied prionopterous genera.
L.c. pp. 545-601, pls. v-xiva, text-figs. 1-38. (K. Jordan.)
- Some new Lepidoptera from the East.
L.c. v, pp. 602-605, text-figs. 1-4.
1899. Some new Eastern Lepidoptera. L.c. vi, pp. 67-71.
- A Monograph of *Charaxes* and allied prionopterous genera (continuation).
L.c. vi, pp. 220-226, text-figs. 39-42. (K. Jordan.)
- On some new Lepidoptera from the East.
L.c. vi, pp. 429-444. (K. Jordan.)
- Two new species of *Charaxes*. **Entomologist**, xxxii, pp. 171, 172.
1900. Description of the hitherto unknown female of *Oenetus mirabilis*.
Nov. Zool. vii, p. 24.
- Some new or recently described Lepidoptera.
L.c. vii, pp. 274-276, pl. v.

- A Monograph of *Charaxes* and the allied prionopterous genera (continuation). L.c. vii, pp. 281–524, pls. vi–viii, xi, xii. (K. Jordan.)
1901. Some new Butterflies and Moths. L.c. viii, pp. 218–220.
On some Lepidoptera. L.c. viii, pp. 401–407, pls. ix, x. (K. Jordan.)
On some new or rare Lithosiinae. L.c. viii, pp. 409–424. (K. Jordan.)
1902. Some new N.E. African Lepidoptera discovered by Oscar Neumann. L.c. ix, pp. 595–598.
1903. A Revision of the Lepidopterous Family *Sphingidae*. L.c. ix, Supplement, pp. cxxxv and 972, 64 pls. (K. Jordan.)
Some new *Cossidae* from Queensland, bred by Mr. R. P. Dodd. L.c. x, pp. 306–308.
Some new Butterflies and Moths. L.c. x, pp. 309–312.
A Monograph of *Charaxes* and allied prionopterous genera (conclusion). L.c. x, pp. 326–342. (K. Jordan.)
Some new or unfigured Lepidoptera. L.c. x, pp. 481–487, pls. xi, xii. (K. Jordan.)
Some new African *Papilios*. L.c. x, pp. 488, 489. (K. Jordan.)
Lepidoptera collected by Oscar Neumann in North-East Africa. L.c. x, pp. 491–542. (K. Jordan.)
1904. Lepidoptera from British New Guinea, collected by Mr. A. S. Meek. L.c. xi, pp. 310–322, pls. ii, iii.
A new form of *Prothoë* from the Solomon Islands. L.c. xi, p. 366.
New *Sphingidae*. L.c. xi, pp. 435–440.
A new African *Melanitis*. L.c. xi, p. 451.
New forms of Butterflies. L.c. xi, pp. 452–455.
Two new *Saturniidae*. L.c. xi, p. 601.
A new subspecies of *Troides victoriae*. L.c. xi, p. 654.
1905. Some undescribed Lepidoptera. L.c. xii, pp. 78, 79.
Lepidoptera collected by Oscar Neumann in North-East Africa (continuation). L.c. xii, pp. 175–191. (K. Jordan.)
On some new Lepidoptera discovered by A. S. Meek in British New Guinea. L.c. xii, pp. 448–478. (K. Jordan.)
Papilio steinbachi spec. nov. **Entomologist**, xxxviii, p. 125.
1906. On a new parasitic Tineid Moth from Queensland, discovered by P. F. Dodd. **Nov. Zool.** xiii, pp. 162–169. (P. F. Dodd.)
New *Sphingidae*. L.c. xiii, pp. 178–185. (K. Jordan.)
Two new *Saturniidae*. L.c. xiii, p. 189.
Some new *Sphingidae* in the British Museum. L.c. xiii, pp. 406, 407. (K. Jordan.)
A Revision of the American *Papilios*. L.c. xiii, pp. 411–752, pls. iv–ix. (K. Jordan.)
1907. New *Sphingidae*. L.c. xiv, pp. 92–96. (K. Jordan.)
Troides alexandrae sp. nov. L.c. xiv, p. 96.
New American *Saturniidae* and *Ceratocampidae*. L.c. xiv, pp. 413–342.
A new species of *Sphingidae*. L.c. xiv, p. 507.
Some new *Himantopterinae*, a subfamily of *Zygaenidae*. L.c. xiv, pp. 507, 508.
Lepidopteren aus Neu-Guinea. **D. Ent. Zeits. Berlin**, pp. 189–198. (K. Jordan.)

- New African *Saturniidae*. **Ann. Mag. N.H.** (7), xx, pp. 1-10.
 Lepidoptera Heterocera, Fam. *Sphingidae*.
- Wytsman, Gen. Ins.** Fasc. 57, pp. 1-157, pls. i-viii. (K. Jordan.)
1908. New forms of Oriental *Papilios*. **Nov. Zool.** xv, pp. 165-174.
 Some new *Sphingidae*. L.c. xv, pp. 258, 259. (K. Jordan.)
 New subspecies of *Parnassius apollo*. L.c. xv, p. 390.
 A new *Papilio* from Africa. **Ent. Mo. Mag.** xlix, p. 249.
 New Oriental *Papilionidae*. **Entomologist**, xli, pp. 1-4.
 Description of a new form of *Zygaena* from Algeria. L.c. xli, p. 185.
1909. Description of a new *Lemonia*. **Ann. Mag. N.H.** (8), iii, p. 7.
 Descriptions of new South American *Arctiinae*.
 L.c. (8), iv, pp. 205-229
 Mauretanisches. **Ent. Zeits. Stuttgart**, xxiii, p. 142
 Catalogue of the collection of *Parnassiinae* in the Tring Museum, with
 systematic notes. **Nov. Zool.** xvi, pp. 1-20.
 Descriptions of some new South American *Arctiidae*, with notes.
 L.c. pp. 21-52, pls. iv-vii.
 A new Aegeriid. L.c. xvi, p. 132.
 Descriptions of some South American *Arctiidae*, with notes.
 L.c. xvi, pp. 268-299.
1910. Catalogue of the *Arctiinae* in the Tring Museum, with notes and descrip-
 tions of new species. L.c. xvii, pp. 1-85, 113-171.
 Descriptions of new species of *Arctiinae* in the Tring Museum.
 L.c. xvii, pp. 172-188.
 Descriptions of *Syntomidae*. L.c. xvii, pp. 429-455.
 List of the *Sphingidae* collected by the late W. Hoffmanns at Allianca,
 Rio Madeira, Amazons. L.c. xvii, pp. 447-455. (K. Jordan.)
 Some new *Sphingidae*. L.c. xvii, pp. 456-459. (K. Jordan.)
 Notes on *Arctiinae* and descriptions of a few new species.
 L.c. xvii, pp. 504-506.
 A new form of *Attacus*. L.c. xvii, p. 507.
 Descriptions of a new Hawkmoth and some *Syntomidae*.
Ann. Mag. N.H. (8), v, pp. 506-511.
1911. Some new Algerian Lepidoptera. L.c. (8), viii, pp. 231-233.
 Two new Lepidoptera from New Guinea. L.c. (8), viii, pp. 233, 234.
 A new Madagascar Arctiid. L.c. (8), viii, p. 255.
 New *Syntomidae* in the Tring Museum. **Nov. Zool.** xviii, pp. 24-45.
 New *Aegeriidae*. L.c. xviii, pp. 45-47.
 New *Syntomidae* and *Arctiinae*. L.c. xviii, pp. 154-158.
1912. An apparently new form of *Lambessa* from Algeria. L.c. xix, p. 113.
 A synonymic catalogue of the Syntomid genus *Balacra* Walk., etc., with
 descriptions of new species. L.c. xix, pp. 119-122, pls. xiii, xiv.
 New Bornean *Aegeriidae* and *Syntomidae*. L.c. xix, pp. 122-124.
 New Mauretanian Moths. L.c. xix, pp. 125-127.
 Some new *Sphingidae*. L.c. xix, pp. 128-135. (K. Jordan.)
 New *Syntomidae*. L.c. xix, pp. 151-186.
 New *Lithosianae*. L.c. xix, pp. 212-246.
 Some unfigured *Syntomidae*, *Aegeriidae*, and *Arctiinae*.
 L.c. xix, pp. 375-377, pls. iii-v.

Verbesserungen und Zusätze zu den Cossiden.

Seitz, Grossschmett. ii, pp. 450-452.

1913. Expedition to the Central Western Sahara, vii, Lepidoptera.
Nov. Zool. xx, pp. 109-143.
 Descriptions of two new *Colias* and some African *Syntomidae*.
 L.c. xx, pp. 187, 188.
 New *Lithosianae*.
 L.c. xx, pp. 192-226.
 Some new Lepidoptera from German New Guinea.
 L.c. xx, pp. 278, 279.
 Descriptions of two new Syntomids.
 L.c. xx, p. 591.
 Notes on *Ixias undatus* Butler, with the description of the unknown female.
 L.c. xx, p. 279.
 Expedition to the Central Western Sahara. Corrections to vii, Lepidoptera.
 L.c. xx, p. 469.
 Some unfigured *Syntomidae*.
 L.c. xx, pp. 470-472, pls. xiii, xiv.
 Descriptions of two new Syntomids.
 L.c. xx, p. 591.
 1914. A new species of *Troides*.
 L.c. xxi, p. 262.
 Description of a new *Troides*.
 L.c. xxi, p. 275.
 A preliminary account of the Lepidopterous fauna of Guelt-es-Stel, Central Algeria. Part I.
 L.c. xxi, pp. 299-357.
Arctiinae in Seitz. **Seitz, Grossschmett.** x, pp. 236-263.
 1915. Lepidoptera collected by the British Ornithologists' Union and Wollaston expeditions in the Snow Mountains, Southern Dutch New Guinea.
Macrolepidoptera, 168 pp., 2 pls. Issued at Zoological Museum, Tring.
 On Lepidoptera from the Islands of Ceram (Seram), Buru, Bali, and Misol. Part I.
Nov. Zool. xxii, pp. 105-144.
 A preliminary account of the Lepidopterous fauna of Guelt-es-Stel, Central Algeria. Part II.
 L.c. xxii, pp. 186-191.
 On the Lepidoptera in the Tring Museum sent by Mr. A. S. Meek from the Admiralty Islands, Dampier, and Vulcan Islands. Part I.
 L.c. xxii, pp. 192-208.
 On Lepidoptera from the Islands of Ceram (Seram), Buru, Bali, and Misol. Part II.
 L.c. xxii, pp. 209-227.
 Lepidoptera of the M'Zab country, South Algeria, collected by Dr. Ernst Hartert and Carl Hilgert in 1914.
 L.c. xxii, pp. 228-243.
 Notes on and descriptions of *Delias*. **Ann. Mag. N.H.** (8), xv, pp. 172-180.
 On the Lepidoptera collected in 1913-1914 by Herr Geyr von Schweppenburg on a journey to the Hoggar Mts. Part I.
 L.c. (8), xvi, pp. 247-258.
 On the Lepidoptera collected in 1913-1914 by Herr Geyr von Schweppenburg on a journey to the Hoggar Mts. Part II.
 L.c. (8), xvi, pp. 392-402.
 Some new *Sphingidae* in the collection of the British Museum.
Nov. Zool. xxii, pp. 291-294. (K. Jordan.)
 Thirteen new *Sphingidae*.
 L.c. xxii, pp. 281-290.
 1916. Some new Lepidoptera from Siam.
Journ. N.H. Soc. Siam, ii, pp. 74, 75.
 Corrections of and additions to our Revision of *Sphingidae*.
Nov. Zool. xxiii, pp. 115-123. (K. Jordan.)

- Further corrections of and additions to our Revision of the *Sphingidae*.
L.c. xxiii, pp. 247-263. (K. Jordan.)
- Some new *Arctiidae*. L.c. xxiii, pp. 264-271.
- Some notes of a faunal and other nature on the Lepidoptera collected by Herr Geyr von Schweppenburg in the Hoggar Mountains.
L.c. xxiii, pp. 287-288.
- Notes on *Amathusiidae*, *Brassolidae*, *Morphidae*, etc., with descriptions of new forms.
L.c. xxiii, pp. 229-318, pls. iii-vi.
- On the Lepidoptera in the Tring Museum sent by Mr. A. S. Meek from the Admiralty Islands, Dampier, and Vulcan Islands. Part III.
L.c. xxiii, pp. 319-334.
1916. Some new Lepidoptera from Siam and Africa.
Ann. Mag. N.H. (8), xvii, pp. 474-476.
1917. Supplemental notes to Mr. Charles Oberthür's "Faune des Lépidoptères de la Barbarie," with lists of the specimens contained in the Tring Museum. Part I.
Nov. Zool. xxiv, pp. 61-220.
- Supplemental notes to Mr. Charles Oberthür's "Faune des Lépidoptères de la Barbarie," with lists of the specimens contained in the Tring Museum. Part II.
L.c. xxiv, pp. 325-373.
- Supplemental notes to Mr. Charles Oberthür's "Faune des Lépidoptères de la Barbarie," with lists of the specimens contained in the Tring Museum. Part III.
L.c. xxiv, pp. 393-409.
- Some apparently new *Notodontidae*.
L.c. xxiv, pp. 231-264, pls. iii-viii.
- Notes on *Metanastria digramma*, with descriptions of two new subspecies.
L.c. xxiv, p. 453.
- On the genera *Melanothrix*, *Drepanojana*, *Melanergon*, *Paracydas*, *Cotana*, *Hypercydas*, *Epicidas*, and *Nervicompressa*, of the family *Eupterotidae*, with descriptions of new forms. L.c. xxiv, pp. 463-474, pls. xi, xii.
- Some new Moths of the families *Arctiidae* and *Eupterotidae*.
L.c. xxiv, pp. 475-492.
1918. Catalogue of *Zerynthiinae* and allied genera in the Tring Museum, with critical notes.
L.c. xxv, pp. 64-75.
- Catalogue of the *Parnassiinae* in the Tring Museum.
L.c. xxv, pp. 218-262.
- On a new species of *Stichophthalma*. L.c. xxv, p. 310.
- Some apparently new forms of African *Nymphalidae*.
L.c. xxv, pp. 338-345.
- A new species of *Ogoa*. L.c. xxv, p. 365.
- Explanation of Plates I and III (Lepidoptera discussed in vol. xxiv).
L.c. xxv.
1919. Supplementary notes to the Review of Houlbert and Oberthür's Monograph of *Castniinae* by Talbot and Prout. L.c. xxvi, pp. 1-27.
- List of types of Lepidoptera in the Tring Museum. Part I: *Sphingidae*.
L.c. xxvi, pp. 193-251.
- Algerian Lepidoptera. (Explanation of figures on Plate I.)
L.c. xxvi, pp. 356-357.
- Descriptions of a new genus and two new species of Heterocera.
Ann. Mag. N.H. (9), iii, pp. 487, 488.

1920. Heterocera collected in Korinchi, West Sumatra, by Messrs. H. C. Robinson and C. Boden Kloss.
Journ. Fed. Malay States Mus. viii, pp. 107-139.
 Rhopalocera collected in Korinchi, West Sumatra, by Messrs. H. C. Robinson and C. Boden Kloss. L.c. viii, pp. 141-163.
 Supplemental notes to Mr. Charles Oberthür's "Faune des Lépidoptères de la Barbarie," with lists of the specimens in the Tring Museum.
Nov. Zool. xxvii, pp. 1-127, pls. xiv-xvii.
 On the genus *Elachyophthalma* Feld. L.c. xxvii, pp. 321-326.
 Preliminary descriptions of some new species and subspecies of Indo-Malayan *Sphingidae*. **Ann Mag. N.H.** (9), v, pp. 479-482.
 Parthenogenesis in two generations of *Lasiocampa quercus*.
Proc. Ent. Soc. Lond. p. 54.
1921. Exhibition of and remarks on Gynandromorphous Lepidoptera. L.c. pp. 10-12.
 Moths of Mesopotamia and N.W. Persia. Part I: *Noctuidae*, *Lemoniidae*, and *Pyralidae*. **Journ. Bombay N.H. Soc.** xxxviii, pp. 170-183.
 Captain Angus Buchanan's Air Expedition. V: Lepidoptera collected in Northern Nigeria and the Southern Sahara in 1919-1920. Part I.
Nov. Zool. xxviii, pp. 142-170.
 Captain Angus Buchanan's Air Expedition. V: Lepidoptera collected in Northern Nigeria and the Southern Sahara in 1919-1920. Part II.
 L.c. pp. 215-229.
1922. A preliminary list of the *Arctiinae* of Pará, Brazil, and a few species from other localities. **Ann. Mag. N.H.** (9), ix, pp. 457-494.
 On a new form of *Epinephele* from Cyrenaica. L.c. (9), ix, p. 668.
 A correction. L.c. (9), ix, p. 692.
 On mimetic Lepidoptera and Hymenoptera.
Proc. Ent. Soc. Lond. p. 22.
1924. Exhibition of *Teinopalpus aureus* and *T. imperialis*. L.c. p. 2.
 Some new or noteworthy Madagascar and African Heterocera.
Ann. Mag. N.H. (9), xiv, pp. 306-317.
1925. Descriptions of new forms of *Delias*, with some notes on others. L.c. (9), xv, pp. 671-677.
 On three North African *Zygaenas*. L.c. (9), xv, pp. 678-680.
 List of Lepidoptera collected by Dr. E. Hartert and Herr Carl Hilgert in Cyrenaica in March, April, and May 1922. L.c. (9), xvi, pp. 200-208.
 A further note on Moroccan *Zygaenas*. L.c. (9), xvi, p. 269.
 Description of a new species of *Eligma* (subfamily *Sarrothripinae*).
 L.c. (9), xvi, p. 269.
 Critical list of the collection of Algerian Lepidoptera of the late Captain N. J. E. Holl. **Nov. Zool.** xxxii, pp. 195-229.
1926. List of Lepidoptera collected from April to end of June 1925 by E. Hartert and F. Young in Morocco.
Bull. Soc. Sci. Nat. Maroc. pp. 324-345.
 On some African *Papilios*, with descriptions of new forms.
Ann. Mag. N.H. (9), xvii, pp. 112-114.
 On some new species and subspecies of *Milionia*.
 L.c. (9), xvii, pp. 114-116.

1927. On some varieties of *Papilio machaon*. **Proc. Ent. Soc. Lond.** p. 24.
 On a new species of *Delias* from Mindanao. **Ann. Mag. N.H.** (9), xix, p. 563.
1929. List of Lepidoptera collected in Morocco in 1927 by Ernst Hartert and Frederick Young. **Nov. Zool.** xxxv, pp. 220-24.
1930. Lepidoptera collected in Morocco by Dr. E. Hartert in 1929. **L.c.** xxxv, pp. 235-243.
1931. List of Lepidoptera collected by Dr. Ernst Hartert and Mr. Frederick Young in Morocco in 1930. **L.c.** xxxvi, pp. 191-200.
 Description of the unknown ♀ of *Paraphrygia rectangulata* Kenrick and a new species of *Phryganopteryx* (Lepid. *Arctiidae*). **L.c.** xxxviii, p. 148.
 Notes on *Syntomidae* (*Amatidae*) with descriptions of new species. **L.c.** xxxvii, pp. 149-158.
1932. On some new *Eupterotidae*. **L.c.** xxxviii, pp. 250-252.
 On a collection of Lepidoptera from Spanish Morocco. **L.c.** xxxviii, pp. 315-330.
 On *Opsiphanes orgetorix orgetorix* Hew. and *O. orgetorix magnalis* (Stich.). **Ann. Mag. N.H.** (10), x, p. 200
1933. New species and subspecies of *Arctiinae*. **L.c.** (10), xi, pp. 167-194.
1935. Some new *Arctiinae*. **Nov. Zool.** xxxix, pp. 239-250.
1936. On a female of *Troides victoriae regis* with male coloration. **Ann. Mag. N.H.** (10), xvii, pp. 306, 307.
 New species of *Chionaema*, *Asura*, and *Miltochrista*. **L.c.** (10), xvii, pp. 482-483.
 New species and subspecies of *Zygaenodes*. **L.c.** (10), xvii, pp. 483-485.
 New species and subspecies of *Caprimima* (*Lithosiinae*). **Nov. Zool.** xl, pp. 1, 2.

VII. BOTANY.

1925. The fertilisation of *Ophris speculum*, *O. lutea*, and *O. fusca*. **Orchid Rev.** xxxiii, p. 99.